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NOTE.—There are many subjects in Africa, such as Racial Characteristics, Political and Industrial Conditions, Labour, Disease, Currency, Banking, Education, and so on, about which information is imperfect and opinion divided. On none of these complicated and difficult questions has Science said the last word. Under these circumstances it has been considered best to allow those competent to form an opinion to express freely in this Journal the conclusions at which they themselves have arrived. *It must be clearly understood that the object of the Journal is to gather information, and that each writer must be held responsible for his own views.*

THE KALAHARI AND ITS POSSIBILITIES¹

THE area included in the Kalahari is that between the Zambesi on the north and the Orange River on the south, lying between the Kimberley-Victoria Falls Railway on the east and the high ground of South-West Africa on the west. Kalahari conditions are extending into the Ovamboland plain on the north-west, beyond the Omatako river, which is the natural boundary of the Kalahari proper in this direction. Although Ovamboland is still to a large extent covered with the southern extension of the Congo forest, it is included in the present account because it belongs physiographically to the great Kalahari plain.

The Kalahari is a wilderness of red, blown sand, covered with grass, thorny scrub, and in the north with forest. Rivers have long ceased to flow through it, but their beds can still be traced and underground water may be struck along them; the original rivers, the Okavango and the Chobe, enter the Kalahari on the north, but terminate in a sort of delta on the old floor of the Greater Ngami Like, and their waters turn

¹ This paper was read at a Meeting of the Society held on June 29th, 1920. For report of other proceedings on this occasion see page 50.

north into the Zambesi. In the south very large river-beds exist, the Molopo, Nosob and Auob, but water very seldom flows down them, and then only for a very short time. The smaller streambeds are sanded up and only detached portions exist, which fill up after thunderstorms and constitute the vleys, sometimes elongated and showing the nature of their origin, at other times quite isolated and rounded off, with no apparent connection with a former river system.

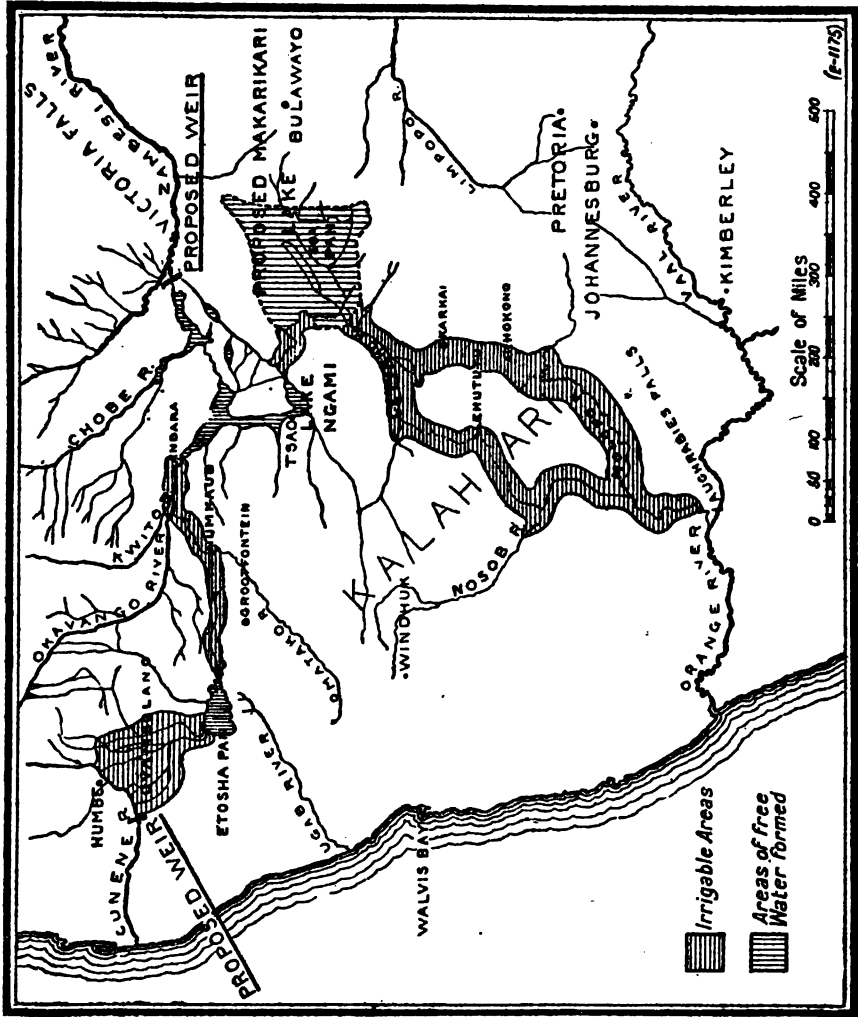
The red sand of the Kalahari is very characteristic, and extends beyond the actual borders of the wilderness, into Prieska and into Rhodesia; in Ovamboland, on the other hand, the sand is white river-sand and the area is distinguished from the Kalahari by the term Omaheke or Gab.

The whole of the area is a vast plain inclined to the south, beginning on the Portuguese border at an elevation of about 3,500 ft., falling to 3,117 ft. at Ngami and thence to about 2,200 ft. at the junction of the Molopo with the Orange River, below Aughrabies Falls. The area immediately round the junction is a deeply eroded bay of comparatively recent origin, and it would be better to regard the lower margin of the plain to be about 2,500 feet, giving a total fall of 1,000 feet in 1,200 miles, or a little less than 1 ft. to the mile.

The Kalahari may be regarded as an elevated plain bordered on the west by the high ground of South-West Africa and on the east by the elevated tracts of the Transvaal and Rhodesia, and in this way it resembles very closely the Great Basin of North America, bordered by the Sierra Nevada and the Rocky Mountains. Both regions are to all intents and purposes rainless and for the same reason; rain-laden winds blow towards them, the air is elevated above the bordering mountains, pressure is reduced and the moisture falls as rain. On coming to the central depressed areas, the air descends, pressure is increased, and whatever moisture is retained, after paying toll to the surrounding heights, is held more tenaciously by the more compressed air. In both these regions, too, there used to be two great lakes that supplied the air with moisture and counteracted the disadvantageous results of their physiographic positions; in the Great Basin there used to be the great lakes Lahontan and Bonneville, the

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MAP OF KALAHARI DISTRICT.

To face page 3.

latter now represented by the Great Salt Lake of Utah, and in the Kalahari there used to be the Greater Ngami, 30,000 square miles in area, and the Makarikari, about half that area.

In South Africa, the primary disaster that destroyed this balance of Nature was the breaking through at the Victoria Falls, by which the Greater Ngami was drained. How it occurred is not certain, but recent events have revived the original idea of Livingstone and Murchison that there was an upheaval by which the rent was formed; the Loangwa valley has long been known to be a seismic area, and New Langenberg, at the head of the valley, was destroyed by a very violent earthquake two years ago. It appears probable, therefore, that a violent warping of the earth's crust took place, cracks or joints were torn in the great slab of basalt that hitherto had kept in the waters of the Greater Ngami, and the river, working along them rapidly, cut the Victoria Falls and the Batoka Gorge below them. The steepness of the river-bed below the Falls, 1,100 ft. in 75 miles, is such as to show that the Falls are not many centuries old, otherwise a great river like the Zambesi would have smoothed out its course. Three or four hundred years would be sufficient to allow for all the phenomena exhibited on this assumption. Lake Tanganyika shows the process in actual progress. Within a comparatively short time the lake was without outlet; then a tributary of the Congo, the Lukuga, worked back and drew off the waters and the level has sunk 40 ft. On the north of the lake a wide alluvial flat exists over which the Rusisi River spreads in a delta, recalling the distribution of the waters of the Okavango over the floor of the Ngami depression.

The Chobe and the Okavango, after the draining of the Greater Ngami, still flowed south to the lake discovered by Oswell and Livingstone in 1849, known as Ngami, and the surplus water went down the Zouga or Botletle to the Makarikari. In 1820 or thereabouts the Chobe pushed forwards a mass of bush and reeds which blocked its course south of the Mababe swamp, and from that time the Botletle failed to reach the Makarikari; the lake dried up, and only two floors, the Ntwetwe and Soa Pans, occasionally contain water.

What has been the result of this draining of two great

lakes? The air over the whole of South Africa used to be supplied by the evaporation from these water-surfaces. They were large enough to have circulatory systems of their own; water was evaporated, was absorbed by the air and was blown on to the surrounding hills, where it condensed and fell as rain; the country was fertilised and the rivers supplied so that they ran all the year round. Between the rains the air was still humid, and the plants were able to thrive without additional moisture. The water-vapour blown inland from the sea, of which the greater part had been dropped on the hedge of mountains bordering the coast, was now reinforced by the internal supply and any deficiency made good; in consequence seasonal rains could be depended upon.

Barrow, Lichtenstein and Le Vaillant, who travelled between the years 1790-1810, tell of the Karroo rivers full of hippopotamus, with forested banks where they shot elephants, rhinoceros, eland, hartebeeste and other large game now confined to the tropics. The great lakes of Central Africa keep the adjoining areas fertile, for the country is too elevated and too remote from the sea to be able to maintain its water-circulation by accessions of moisture derived from the ocean alone. In North Africa there are evidences for the former existence of great lakes in the Chad area and north of the bend of the Niger at Timbuctoo; when these were in existence North Africa was a fertile country. The whole sea-board of North Africa is littered with the ruins of cities whose existence depended on the export trade of corn and other agricultural products from the interior of Africa, which were sent to all known parts of the civilised world.

The effect of the drying up of the lakes in North Africa is apparent in the Libyan and Sahara deserts: what has happened there is occurring in South Africa at the present day. The process is masked in South Africa by the presence of enormously valuable mines, gold and diamond, which afford exceptional markets in the interior for produce that would not otherwise pay to grow; by railway and industrial development stimulated and to a large extent paid for by these mines and to other less obvious factors. But, though the disastrous effect on South Africa produced by the drying up of the Kalahari

Lakes is not noticeable in the towns or in the trade returns, it is very evident in the country districts. There is a mass movement of the population into the northern and eastern Transvaal, and further north, to British East Africa—anywhere, in fact, within the moisture cloud derived from the sea, or that from the great lakes which is retreating steadily northwards.

The most convincing proof of this migration is contained in a pamphlet by Professor W. M. Macmillan, analysing the census returns of 1911 and 1918. In a map representing the results, he shows an area of decreased population stretching throughout the centre of the Union. Those who are left in this area are tending towards the condition of Poor Whites, the most hopeless class of shiftless humanity to be found anywhere; these unfortunate people are those who by the recurring droughts lose all their flocks and herds, their harvests, and are finally sold up and become landless. In 1918 they were reckoned at 8 per cent. of the population, but the 1919 drought brought up the percentage to at least 10 per cent., and an equal number are on the verge of falling within the class of "unredeemable poor." Reliable estimates of the loss in crops and in sheep and cattle, directly due to the drought of 1919, place it at £11,000,000, and to preventable disease, to a large extent caused by impoverishment and thus attributable indirectly to the drought, at £8,000,000. It is, however, the moral influence of the droughts that is so pernicious; farmers year after year see their best efforts nullified, their hopes raised by every promise of a good season, to be dashed by its failure and this persistently. Formerly droughts occurred, but they were followed by a series of good years, when the losses were more than made good; but, comparing equal spaces of time of 23 years, there were :—

1874–1896—7 good years; 8 normal years; 8 droughts.

1897–1919—2 good years; 4 normal years; 17 droughts.

This was taken from records from the Eastern Province, and is directly opposed to the findings of the Government Commission, which established that there had been no decrease in rainfall. The latter factor is, however, no indication of the climate of the country or the state of its agriculture.

Very often there are three summer months without any rain at all; the veld becomes dried up, the animals starve and the crops are destroyed; then, in the autumn, heavy rains set in, and the resulting cold kills off what remains of the flocks and herds and the pulverised soil of the fields is washed away, ruining them for the following year's ploughing. Such a year, therefore, although showing a high rainfall, is a bad drought year. The incidence of the rain is what counts, and that is tabulated in the above comparison of the years before and after 1897.

Another factor of more importance than the rainfall is the humidity or dryness of the atmosphere. The rainfall on the south coast of England is about the same as that of Johannesburg or Grahamstown, 30 inches. But whereas the evaporation in England is 15 inches, or half the rainfall, in South Africa it is 90 inches and over, or at least three times the rainfall. That means that in England, when the rain sinks into the ground, only half is required back by the air; the rest can remain to supply the plants with their necessary water, and the overplus can flow into springs to supply the brooks and rivers. In South Africa, on the other hand, the air is so dry that three times as much rain is required before even a balance between rainfall and evaporation can take place; as a consequence, directly the rain falls it is wrung out of the soil before it can penetrate to the roots of the plants, and the ground is as dry after the rain as it was before. Without considering the rainfall, the effect of the Kalahari lakes, acting as great evaporating dishes in the centre of the country, was to keep the air supplied with moisture, so that the intense dryness of the atmosphere that now prevails could be mitigated and the vegetation allowed to live over from one season to another without being withered and dried out of existence. In Johannesburg in 1904 the evaporation at the Union Observatory was 92 inches; since then a big suburb has arisen round the Observatory, and every householder has a garden which he assiduously waters, with the result that the evaporation has steadily decreased to 51 inches. Outside the suburbs, along the reef, the evaporation remains the same, something over 90 inches. Here, then, we have a very perfect instance

of a permanent moisture cloud formed by artificial irrigation, and if we could restore the Kalahari lakes we could do the same; but being so big—the whole area contemplated in the Kalahari scheme amounts to one-tenth of the whole of the parched lands in South Africa—its effect will be felt over the whole of the sub-continent.

The Ovamboland section is of a different nature. On the north of the great plain 70,000 square miles in area, there are two rivers, one passing south from the Angola Highlands and turning west to the Atlantic; this is the Cunene: the other descends from the same highlands and turns east; this is the Okavango, whose waters eventually find their way to the Zambesi. Formerly the Cunene was blocked in the west by the hill-ranges of the coast, so that the water flowed south and east and found its way into the Okavango. Then, also, the latter river was blocked with rapids, consequently the flow was retarded and the Cunene waters were forced to find an outlet by cutting sideways. In this way the whole of Ovamboland has been traversed by the shifting river-courses and the entire area consists of shallow elongated depressions separated by sandy elevations marking the former courses of the looping connecting branches between the Cunene and the Okavango. On the south of the plain the river came up against the high limestone ranges of Otavi and a vast shallow pan was created, the Etosha, a level lake-bottom like the Ntwetwe and Soa Pans, with an area of 5,000 square miles.

Then the Cunene broke through the retaining wall of the coastal mountains and produced the cataracts; at the same time on the east the Okavango was lowering its bed as the course was cleared more and more to the Zambesi. The consequence is that, whereas formerly the whole of the Ovamboland Plain was a vast tropical marsh covered with dense forest, now the rivers only overflow into the plain in high flood and the area of the inundation is yearly becoming less. So rapid is the restriction of the flooded area that places which were visited by Galton and Andersson in 1860 that then received the benefit of the inundation are now scarcely affected and famine stalks throughout the land continually. Rivers that then ran have been dry for 60 years, the great forests have

half their trees dead, and the whole plain is rapidly turning into a waterless wilderness, soon to become a sandy desert.

The drying up of this area has had most unfortunate results for areas outside South Africa, and the effects are found far north of the Zambesi. The Ovamboland plain is 70,000 square miles, the Etosha 5,000, total 75,000 square miles of forest, marsh and lake, sweltering under the tropical sun. The evaporation was enormous. The resulting water-vapour was blown over the adjoining territories, South-West Africa on the south, the Kalahari on the east, and the great knot of highlands in the central part of Angola and the Katanga in Belgian Congo on the north. The condensation of this moisture in the last-named region supplied the head waters of the Cunene, the Okavango, the Chobe, the Zambesi and the southern great tributaries of the Congo. Now this vast area has changed into a waterless wilderness, the trees remain to some extent, but the transpiration from them is insignificant compared to what it used to be, but all around there are vast sandy tracts or areas covered with withered grass. The elimination of this huge supply of moisture in the elevated interior of Africa has resulted in the serious diminution in all the great rivers which supply half the continent of Africa, and, as the desiccation becomes intensified, so will the effects reach further and further afield.

What is the remedy for this state of affairs? Many say there is no remedy; that the desiccation is part of a general condition that is affecting the whole planet, and that we must combat it by irrigation. Irrigation on the ordinary scale is an extremely costly business, and is quite local in its effects, benefiting only a small section of the community who can afford the high capital charges and water rates. The area irrigated in the Union, including all the projects now in operation or about to be built, is well under a million acres. The area of parched land against which the irrigated land is set to retain its moisture is well over a million square miles, or, roughly, the irrigated land forms 1/700th of the arid land. Measured in increased rainfall, this would represent a little more than one-tenth of an inch a year—quite negligible. Whether the world as a whole is becoming dried up is another

matter, and is outside the scope of this paper; but what we can say is that South Africa is becoming dried up from causes which we can lay our hands on and can prevent with a very small expenditure of capital. It would be a very difficult business to convince a community that such a scheme would be an advisable one to carry out when it would be impossible to demonstrate the direct benefits to the various members accruing from it. Fortunately, however, there is a vast area in the Central Kalahari which is of practically no use at the present moment which could be irrigated, and the profits from settlement in this region are more than sufficient to carry out the prime works necessary to restore the former Kalahari Lakes.

These prime works consist essentially of two weirs, one a masonry dam on the Cunene preventing the water flowing to the Atlantic from running to waste and turning it on to the Ovamboland Plain. Secondly, the construction of a long wall across the Chobe on the flood plain at the junction of the Chobe and Zambesi, by which the waters coming from the west would be turned south into their old channels. There would have to be also a certain amount of clearing in the bed of the river, especially south of the Mababe swamp. Then the waters from these great rivers, the Chobe and Okavango, reinforced by what comes from the Ovamboland Plain, would flow down the Zouga or Botletle into the Makarikari depression.

This last is a vast sandy, grassed plain, with two lake-floors, the Ntwetwe and Sou Pan's; it has been dry now for a hundred years, and it will take several years to restore the ground-water lost during that time, so that seepage will be a very serious item. It is not, however, necessary to wait for the Makarikari to hold water before beginning irrigation; the water from the Botletle can be short-circuited past the depression and let directly on to the irrigable lands on the Letyaho, Okwa and its continuation towards the Molopo and Nosob rivers. Only the surplus water would be turned into the depression. Once the water began to come back the internal circulation would be restored and the rivers on the east of the depression, the Shua and others, would begin to flow. To the west

also all the great rivers, now dry, that come from the Windhuk Mountains into the Kalahari, the Epukiro, Nosob and Auob, would begin to fill, and as the years went on the whole of the Kalahari would be reclaimed. What would happen would be that the water that falls in the area, instead of being drained away to the sea and being lost to the land, would be impounded, and each year's rainfall, the moisture for which now has to be brought in from outside, would remain and be added to the general stock of the country. The stock of water in the country would thus gradually accumulate. Some of the evaporated moisture would indeed be blown outside the area, but this would be more than compensated by moisture blown in from outside. It often happens in South Africa that the weather is propitious for rain; the barometer falls, the clouds come up, but nothing happens. The barometric depression may be such that it would cause rain with, say, 80 per cent. moisture; but if there is only 75 per cent. moisture the rain-clouds blow away to somewhere else where sufficient moisture in the air exists to reinforce them. A very little increase of moisture, therefore, will more than double the rainfall, and the converse is true; the more the land is droughty, the more will the rains shun it.

In regard to settlement, Ovamboland is so peculiar that it should be left out of account where immigration is concerned. Its natural condition is a tropical swamp, and the Ovambos are especially constituted to thrive in such a climate; but it is exceedingly depressing for white people. The malaria trouble is there also, but it should not be a menace under proper hygienic conditions, not the least of which is good food, properly cooked. The Ovamboland portion is, however, essential to the settlement scheme, as, without it, there would not be enough water. One could do without it by turning in the Zambesi, but there are economic and sentimental reasons against meddling with the Victoria Falls, and it is better to obtain the water from Ovamboland.

The Kalahari side lies in the Crown Colony of Bechuana-land. No white occupancy of the land has been allowed hitherto, but there are a number of traders and hunters living in the country. The native population is about 150,000,

mostly aggregated on the eastern border, and the central portions are inhabited by nomad tribes and are used by the chiefs as hunting grounds. In the north, near Ngami, there is the considerable tribe of the Batawanas. There is no intention of ousting the natives or taking their land, as in Rhodesia; but as this land in the centre of the Kalahari is becoming more and more useless as years go by, it is proposed to take out irrigation channels and to irrigate specific portions pointed out by the natives and by the cultivation of these areas the natives will be insured against famine for all time. In exchange for these areas, which will be entirely under native rule and part of their inviolable territory, it is proposed to parcel out the land along the main channels from Ngami to the Orange River into irrigated farms and outside the reach of the irrigating canals, into ranches. 10,000 square miles of such land can be irrigated. It is exceedingly rich, and almost anything will grow; cotton and indigo are indigenous, and these with sugar would form the staple summer crops; wheat, barley, peas and beans would form the winter crops and mealies and Kaffir corn the autumn crops. Transport is near at hand through the Rhodesian railways, and, besides, the main canals will afford a waterway to the Victoria Falls.

The estimated net yield of an acre on the least valuable of the South African crops, mealies, is £5 an acre, so that a farm of 100 acres producing £500 a year would provide sufficient income to keep the settler and his family and yield an ample provision for paying off the mortgage. In fact it would pay the organising body, whether Government or a private company, to obtain settlers, to provide the land, build houses and outbuildings, stock with cattle and implements free of any contribution of the settler himself in the beginning, because, if properly worked with adequate machinery, stock and suitable seed, the settler must make good. In the Cape, on the Orange River west of Upington, a small irrigation scheme on identical ground has been worked by poor whites under the superintendence of the Dutch Reformed Church, and these, the most hopelessly indolent and careless people, have not only made good, but some of them have become rich. What these "unredeemable poor" have done, picked

settlers can do, and it would be a paying scheme, because the organising body would rapidly recoup its expenditure in other ways besides, for instance in the sale of township plots and trading rights. If, the original area laid out for settlement were to be 1,000 square miles divided into 6,000 farms of 100 acres each, and the sale price were to be £10 an acre, the net result would be £6,000,000, a sum more than sufficient to pay for all possible charges of construction and yield ample profit to the body undertaking it. Once the main channels are established the succeeding areas downstream can be developed, and a modest estimate gives the area of irrigable lands at 10,000 square miles, sufficient to accommodate 60,000 families.

E. H. L. SCHWARZ.

LAND TENURE AMONG THE BANTU WANYIKA OF EAST AFRICA

IN various cases that came before the High Court at Mombasa, I had occasion to consider native customs relating to land in the occupation of the coast tribes in the neighbourhood of Mombasa, and the following notes are based on the best procurable evidence.

The natives occupying the land that lies between the narrow strip of Arab settlement on the coast and the arid thorny desert behind from the Tana River southwards to what is now known as "Tanganyika Territory," consist of a number of closely related Bantu tribes, known generically to the Waswahili as "Wanyika," or people of the thorn desert.¹

They probably migrated at no great distance of time back from the North into the area they now occupy, and the tradition of the migration is strong, though as regards the Jibana, the particular sub-tribe to whom these notes specially refer, it is mixed up with a fanciful story of following a stone which rolled before the tribe, who settled where the stone stopped.

Bantu customs regarding land tenure may vary to some extent in different parts of Africa, and if such variations are known to any reader of the JOURNAL it would be of the greatest interest if they could be collected and compared.

The Jibana are one of the smallest of the sub-tribes of Wanyika, and live in an area some 12 miles to the North and West of Mombasa, and, in spite of the Arab and Swahili settlement between them and the sea and the Indian and European influences spreading from Mombasa, their customs seem to have been singularly little affected.

The boundaries of the tribal area, as between them and their Nyika neighbours to the North and South and their Muhammadan neighbours on the East, are in places distinctly marked

¹ There is in part of this area also a small number of the autochthonous hunting people known as Waboni, Wasanya, or Wat. These people are not cultivators and do not come within the scope of this paper.

by physical features and in others more generally known by such marks as old baobab trees or less distinct physical features, such as a hill or slope. The general area was, however, well known to the members of the tribe, and when questions arose as to the exact position of their Eastern boundary they were easily settled by the Government cutting a line which approximately followed the vaguer line of tradition.¹

This Eastern boundary was of some importance, as it was the custom of the tribe that when a member became Muhammadan he was to some extent outcasted from among his pagan fellows and had to move to the East of the line, give up his rights to use the land occupied by the tribe, and settle among his co-religionists of the coast.²

This custom is of great interest as showing the determination of the tribe to keep their own customs intact, as they apparently realised that a Muhammadan, although of their own blood, would be certain, if allowed to remain within the tribal area, to introduce the Muhammadan law of individual freehold, which would be destructive of the communal rights and customs of the tribe.

It may be as well at this point to state shortly the facts which gave rise to the case in which the customs of the Jibana came under review, as they will show how the issues to be decided necessitated a close enquiry into the customs of the tribe in so far as they relate to the use and occupation of land.

A certain Mombasa Arab had for many years been in close

¹ These tribal boundaries between the Wanyika sub-tribes are in many ways reminiscent of the old boundaries between the clans in the Scotch Highlands, where neighbouring clans occupied respectively well-defined "countries," but with possibly debatable lands between. Further than this there is a striking parallel between the manner in which individual members of a Highland clan exercised rights over portions of the clan country to the manner in which the individual Mnyika to-day exercises similar rights over the tribal land. And just as the communal tenure in the Highlands has given way to individual freehold, we see the beginning in East Africa of the pressure of external circumstances leading in some places to the occupier of a portion of communal land asking for something in the nature of a freehold.

² Such a convert is known as a "Haji" (plural "Mahaji"), which does not mean that he has been on the pilgrimage to Mekka, but possibly that he is on the more difficult one to Paradise.

relations with the tribe, paying long visits to their country annually at harvest time, buying their produce, and shipping it down to Mombasa for sale. In carrying out his business dealings, he had advanced money to a number of the Jibana, against which they had assigned him as security their cocoa-nut trees, which stood for the most part on the banks of a small river.

When the Arab died, his son who was appointed to be his "Wasi" or executor, obtained the registration of the documents assigning these trees, drew an imaginary line of several miles in length round the area where the trees stood, and sold the whole property to an Indian merchant as a freehold estate acquired by his father suitable for development into a plantation.

The Indian put in a manager, who began operations by putting up a house, cutting boundary lines, fencing off the trees in question, and forbidding the Jibana access to the river. This led to risings of the natives and attacks by them on the manager and destruction of his fences. The Indian owner then applied for police protection, which was supplied by the Government, who put down the risings, but soon realised that the unrest was founded on a serious claim of right and decided that it should be tested in the Court.

Consequently a representative action for ejectment was brought by certain members of the tribe against the Indian, who relied on the sale to him by the Wasi and the documents of assignment of the trees to the deceased Arab. These latter were drawn in Arabic in the Muhammadan form of an out-right sale, and had been enlarged by the Wasi into a freehold grant to his purchaser of several square miles. At the trial the defendant admitted that this extended claim could not be maintained in its entirety, and the real issues, therefore, that remained to be tried were whether the Arab could acquire and had acquired any title to any land in the occupation of the tribe by purchase, and what was the true nature of the documents purporting to assign the trees.¹

¹ Questions were also raised as to the conflict of law between the Islamic Law in the Sultan's Dominions, the applied Indian Transfer of Property Act, and Native Custom, but they are not further referred to as being beside the matters to which this paper is directed.

Now the first proposition which the native plaintiffs established, though rooted in vague beliefs, had a very practical bearing on their case. Their idea of a Supreme Being is that there exists a sky spirit who sends the rains which fertilise their mother "Earth." All are children of this mother, and no child can even imagine the idea of selling his own mother. From these somewhat vague and poetical beliefs has proceeded the custom that all members of a tribe have an equal right to benefit by use of that portion of the earth in the tribal occupation, but no one member of the tribe has the right to part with any portion of it, inasmuch as all the other members of the tribe have like rights with himself to benefit by it. And equally the tribe has no greater right as a body than have its individual members to sell the mother earth which they have occupied.

It follows logically from this that no person who is not a member of the tribe can acquire from the tribe greater rights than the members of the tribe possess. And therefore in practice should a stranger desire, for trade or other purposes, to occupy land within the tribal area, he can neither purchase nor rent it, but can occupy only by permission granted by the "Wazee" or Elders, which permission is at pleasure and may be withdrawn at any time.¹

The tribal area being thus safeguarded for the use and occupation of the tribe, we next see how this use is regulated by customs which directly flow from the basic idea of common rights. As there is nothing in native agricultural methods comparable to intensive cultivation, and as, unlike England, there is more land than there are people to cultivate it, the general practice of agriculture is to clear a bit of bushland and cultivate it till it loses its first fertility, and then to let it go back to bush and clear and cultivate another place in like manner.²

¹ Such permission is generally granted on payment by the stranger of a small gift to the Elders known as "mkate" or bread.

² Nothing cuts deeper into the roots of the communal life of an African tribe than reducing the size of "Reserves" to limits which prevent promiscuous and wasteful cultivation. It necessarily leads sooner or later to claims for individual ownership of cultivated plots.

This manner of cultivation is controlled by tribal custom to the following extent :—

Any member of the tribe may clear and cultivate any portion of the tribal area which is not in use by another member of the tribe, and so long as he remains in occupation of that portion he cannot be interfered with, but as soon as he gives it up any other member of the tribe may occupy and use it.

But, on the other hand, any man who has cleared a plot of ground may receive payment from another for his labour of clearing, on which he is bound to allow the second party to occupy that particular plot.

There is here in the native mind no idea of selling the ground itself, but it will be easily understood how such a transaction may be falsely represented or honestly give rise to mistaken views with regard to it on the part of strangers. Equally, of course, a man may sell the produce of his plot, which is the result of his own labour, and in the event of his death his personal goods go to his family while they retain the same rights and no more than he had to use the land cleared and cultivated by him.¹

The Englishman, and particularly the English lawyer, in a foreign country is always trying according to the theories of his own law to find the ultimate title to land somewhere, and he is often not a little at loss to understand a system of tenure which, without a thought of theoretic mysteries, has been so admirably adapted to the communal life of a tribe in a country where land can be had for the asking. It being established that the Jibana did not own nor claim title to the land in question, it was evident that the purchaser could not claim a title derived from them. It remained, then, to consider the bearing of the documents relating to the cocoanut trees.

One would naturally expect to find that a permanent and valuable tree like the cocoanut would be dealt with by agricultural customs differing from those controlling the opening up of land for yearly crops, and such, in fact, is the case. But

¹ It may be noted that the Wazee of the tribe disclaimed any greater right to deal with land in the tribal occupation than ordinary members of the tribe, alleging that they, too, were children who could not sell their mother.

so clear is the determination in the native mind not to part with any portion of the soil within the tribal area that a system of mortgage of cocoanut trees has been evolved similar to that known as a Welsh mortgage. And just as yearly crops may be sold to a stranger, so may cocoanut trees be mortgaged to him and he be allowed to take the produce.

The arrangement is as follows :—

The owner of the trees wishing to raise a loan assigns them to the lender, who thereupon has the right of access to the trees and of taking the fruit for so long as the loan remains unpaid. On the other hand, the owner can pay off the loan at any time, whereupon the lender's right to take the fruit at once ceases. This was, in fact, the transaction that had taken place, which had been interpreted by the Arabic document writer as a sale of the trees (which in Muhammadan Law covers the land on which the trees stand), and eventually enlarged by the Wasi into a sale to the Indian of some square miles of freehold.¹

African customs, however fanciful their origin, are in practice largely based on common sense and the experience of ages, and the instances quoted here only show once again how well adapted they are to the circumstances and conditions of life of the people by whom they have been evolved.

ROBERT W. HAMILTON.

¹ The nett result of the case was that the Indian purchaser retained only the right of access to and of harvesting the fruit of those trees on which the money advanced had not been repaid.

OSTRICH FARMING IN SOUTH AFRICA¹

THE ostrich belongs to the small group of birds known as the ratites or running birds, all of which are unable to fly, while birds capable of flight are known as carinates. It is by far the largest of all living birds, and at the present day is found in the wild state mainly in Africa, though in times past it roamed over the adjoining countries of Arabia and Syria, extending as far as South-Eastern Europe and India; a few still survive in Syria. Also it is the only living bird with but two toes to its feet, the American ostrich, a much smaller bird, having three toes, while most birds have four. Its head reaches from seven to eight feet from the ground, and the total weight of the body is about 250 pounds. The wings are small in comparison with the size of the body, and useless for purposes of flight; the feathers also render flight impossible, since their loose open flue can offer no resistance to the air. During the chick stage both the cocks and the hens are alike in their mottled colour, but later the plumage of the former becomes black and that of the latter grey; the body colours also differ, the cocks becoming a bright scarlet round the eyes and front part of the tarsi when the breeding season commences.

Many references to the ostrich occur in the Bible and in the ancient classics, and from time immemorial its plumes have been employed for personal adornment, their sway extending from the native savage to the king and queen on the throne; and to-day their popularity is as great as ever. Ostrich plumes owe their attractiveness to the graceful artistic effect which they confer, compared with the hardness and stiffness of the feathers from birds like fowls and ducks. Originally they were procured from hunting the wild ostrich over the arid plains of Africa, and had not the bird been domesticated

¹ This paper was read at a Meeting of the Society held on May 28th, 1920. For report of other proceedings on this occasion see JOURNAL of the Society for July, 1920, page 324.

it would doubtless have become extinct ere this, a prey to the hunter in his quest for its precious plumes.

Ostrich farming on a methodical basis was first undertaken in Cape Colony a little over fifty years ago. The birds were procured as chicks from wild nests, as adult wild birds cannot be rendered amenable to farm life. Even now ostrich chicks from their earliest age must be kept closely associated with the people on the farm, otherwise they develop their original wild nature and are almost impossible of control. The early farmers had to work out the best methods of managing and feeding the birds under farming conditions, of growing the feather crops and of clipping and quilling, of breeding and rearing chicks, and of treatment against the many diseases to which they are subject. All this was gradually acquired by observation and experience, and, as the bird was found to be highly remunerative, it soon gave rise to an important agricultural industry in the Cape Province, and to a less degree in the other Provinces of the Union. The export of feathers from domesticated birds gradually replaced that from wild birds and increased greatly in amount until, in 1913, the year before the outbreak of war, the weight of feathers exported reached 1,023,307 lb., valued at £3,000,000, the product of about 1,000,000 ostriches of all ages and quality.

The ostrich is a rover by nature, and to restrain the wandering tendency it was necessary to fence in the farms as ostrich camps, a very expensive undertaking considering the large size of most of the farms, often thousands of acres in extent. Also it was early found that the bird would not produce its best feather crop if fed on natural veld alone, but that more highly nutritive food must be provided. Lucerne was soon found to be the crop best adapted for the purpose, and this resulted in the laying down of extensive areas for its cultivation, calling for elaborate and expensive schemes of irrigation. In this way the returns from the industry have been of great assistance in the general development of agriculture in South Africa.

In addition to lucerne and veld the ostrich is given many other kinds of food, such as rape, barley, prickly-pear and American aloe, and root crops such as mangold, while it

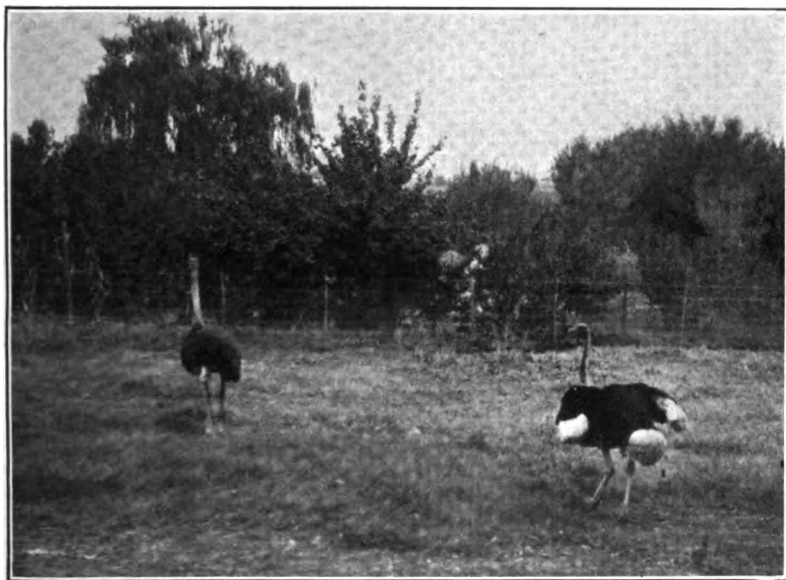


FIG. 1.—A PAIR OF BREEDING BIRDS.

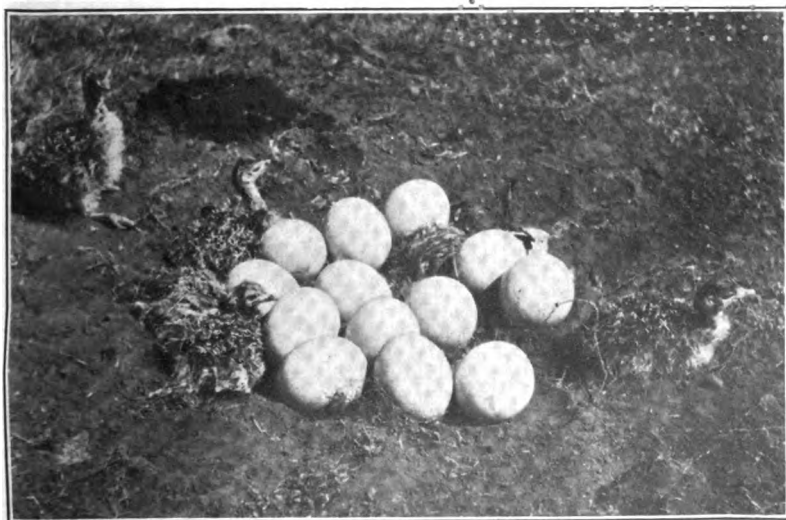
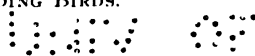


FIG. 2.—CHICKS HATCHING IN NEST.

THE UNIVERSITY OF CHICAGO

freely takes grain of all kinds, particularly maize (mealies), barley, wheat and kaffir-corn. Where pasturage is insufficient much of the food is chopped up and hand-fed. Grasses are usually taken only when young and short, and again when the seed stalks can be stripped. Bone has to be provided in most parts of South Africa, both for the lime and the phosphates it contains. Water does not appear to be necessary where the food is succulent. Sharp grit is always required for assistance in the grinding up of the food in the gizzard. The proverbial digestive powers of the ostrich find their full justification in farming practice, for the bird eats nearly the whole day long, and has a food canal of an enormous length, 70 to 80 feet, and is by no means-discriminative in what it selects.

The first ostriches were farmed without any regard for the quality of the plumes they produced, and any birds old enough were used for the breeding of chicks; but as the characters of the feather came to be better understood far higher prices were obtained for superior plumes as compared with inferior plumes. The progressive farmer therefore discarded the birds producing inferior feathers, and maintained only those giving valuable plumes, selecting only the best as breeders. High prices are paid for ostriches growing the best plumes and also for chicks, as much as £1,000 being given for breeding pairs of established merit and £25 for their chicks. The characters of a plume to which importance is attached relate to length, width and shapeliness, as well as to texture, density, evenness and lustre of the flue. By breeding always from the best birds, and combining all the most desirable feather points in one strain, the farmer has by this time produced a plume which is far superior to that grown by the wild bird. High feeding is also an essential factor; the birds produce their best plumage only when in a high state of nutrition and under careful management.

A complete ostrich feather consists of an upper part or plume bearing the soft fluffy portion called the flue, and a lower part without any flue called the quill. The plume necessarily ripens before the quill, and must then be clipped, otherwise it would undergo serious depreciation by remaining

on the bird, exposed to wear and tear. All plumes are at their best immediately they are full grown and the flue opened out, and the tip especially is likely to injury and wear if left on the bird. After clipping the ripe plume the quill is left to ripen, which takes about two months longer. Usually three rows of feathers are clipped from each wing, the first and second rows having each about 36 plumes and the third row a few less; in addition, the feathers are taken from the tail, but these are much smaller and less valuable than the wing plumes. In the cock the first row of wing plumes are pure white, except a few at each end of the row termed "fancies" or "byocks," which are admixtures of white and black. The white wing plumes of the cock are the most valuable of all, the best being called primes (Fig. 3); the corresponding plumes in the hen are white, more or less tinged with grey, and are not quite so valuable as those from the cock. The second and third rows are black in the cock and drab in the hen. Whenever an ostrich is handled, as when clipped or quilled, it is placed in a plucking-box and its head covered with a hood; its eyes being thus covered, it remains quiet during the operation.

When the quills are ripe they are drawn, either by the hand or by means of pincers, and a new feather at once begins to form from the germ at the bottom of the socket, showing at the surface in about a month's time. The plume requires six months in which to complete its growth and the quill two months longer, so that under the best of conditions a clipping can be obtained every eight months; but many farmers find it better to allow the quills to remain in their sockets for several months after ripening, and thus secure only one feather crop each year. No cruelty to the ostrich whatever is involved in clipping the plumes and drawing the quills. In fact, the clipping of the plumes is no more harmful to the bird than the shearing of the wool is to sheep or the cutting of the hair and the trimming of the nails to ourselves. When fully grown all these are so much dead horny material, without blood vessels and nerves, and their severance involves no pain whatever. The drawing of the quills can only be compared with the brushing out of the dead hairs from the head day

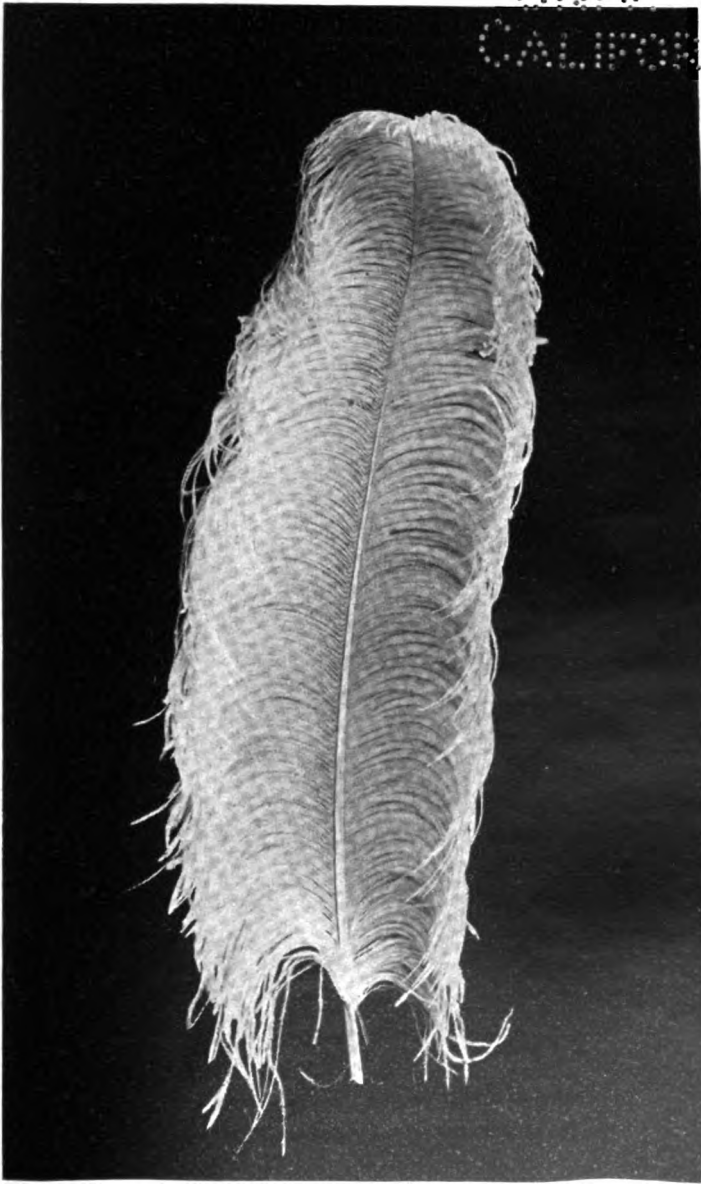


FIG. 3.—A HIGH GRADE NATURAL PLUME.

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by day. If quilling were not practised the feather crop would be uneven and practically valueless; it is only by drawing all the quills at the same time that all the feathers start their growth together and come to ripeness at the same time. The longest feathers in the wing of the ostrich have been found to grow at the rate of a quarter of an inch each day, though the rate is much influenced by the condition of nutrition. When not in good condition the feather crop is inferior, and defects in the formation of the flue occur which are known as "bars." Before the proper care and feeding of the ostrich were understood these defects occasioned serious loss in the value of the feather crop.

The wild ostrich breeds when four or five years old, but owing to improved conditions under domestication chicks are now frequently obtained from birds before they are two years old. Only birds giving superior plumes are selected as breeders, and they are necessarily of the best constitutional vigour. Breeding sets are placed apart in small camps, usually a cock and a hen (Fig. 1), though often a cock will be given two hens. When ready for breeding the cock is bright scarlet round the eyes and beak and down the front of the tarsus or shin of the legs, and is very vicious. The nest is simply a shallow depression in the ground hollowed out by the birds (Fig. 2). The hen lays an egg on alternate days, and continues until from twelve to sixteen are laid before starting to sit. When the parent birds are allowed to hatch the chicks the cock sits on the nest by night and the hen by day, the period of incubation being six weeks. Artificial incubation is largely adopted, and if the eggs are removed from the nest as laid the hen continues to lay many more than usual. Most farms have several incubators which are kept going throughout the breeding season. They call for very careful regulation and watching during the whole of the six weeks required for the chicks to hatch, and are maintained at a temperature of about 100 deg. Fahr.

The ostrich chick is covered with bristly down feathers on hatching, and can walk and run about within the first day or two, and also begins to peck at food (Fig. 2). One or both of the parent birds may be allowed to rear the chicks for

the first three or four months, or they may be looked after by a native herd. As already mentioned, care has to be taken that their wild nervous nature does not develop or the birds will be difficult to manage later. Chicks are very liable to parasitic diseases, and suffer greatly during cold rainy weather, otherwise their rearing presents no great difficulty.

Ostriches are subject to a number of diseases, particularly while young, and require constant care until they get over their first year. Most of the diseases are due to the attacks of parasites which live upon and at the expense of the bird. The chief are tape-worm (*Tænia*) and wire-worm (*Strongylus*). The former live in the intestine, the separate joints breaking off when ripe and appearing on the surface of the dung, while the latter attack mainly the wall of the stomach and intestine. Many remedies are in use against both tape-worm and wire-worm. While the chicks are well fed and cared-for the parasites are not very harmful, but if they are allowed to get into low condition, as during a period of drought, they are unable to resist the inroads of the parasites and heavy mortality results. A disease apparently due to the spores of a mould (*Aspergillus*) sometimes attacks young chicks and may render their rearing almost an impossibility. Where not carried off by disease or accident the ostrich lives to a good old age, probably from fifty to a hundred years.

J. E. DUERDEN.

SOME ENGLISH WORDS IN FULANI AND HAUSA

TOWARDS the end of last year there were some letters in *The Spectator* pointing out examples of the incorporation in the French and German languages of certain modern English words; from the perusal of these it occurred to me that it might be of interest to the general public if I collected the scattered notes I have made at odd times of various English words which have been introduced into the daily life of Nigerian natives—at least I suppose that the conditions are the same, *mutatis mutandis*, in the many other languages spoken in Nigeria; but I only speak with certainty of the two local languages which I know, Fulani, the most widely spoken language in West Africa, and Hausa. It must therefore be understood that when the word “native” is used it may not always apply to natives other than Fulani or Hausa.

The conditions under which English words are incorporated by the French are different from those under which the natives use some of our words. In the majority of such cases the need of the word arose from our introducing an article or an idea which had never before been dreamt of by the native, who consequently had no name for it; and so the simplest thing for him to do was to adopt the English word. In the case of the French borrowing a word from us they have either taken it in its entirety, or they have added a typical French ending; *cf.*, “Pour le championnat du monde de boxe poids lourds, Dempsey knockout Willard en un round.” But where the native has borrowed a word it is usually so disguised that it is hard to recognise its English origin. These disguisings may be the result of two processes:—

- (1) Standard phonetic changes.
- (2) Mere mutilation, due to inability to catch and reproduce a difficult English sound.

It may be remarked here that my intention is to deal only with words which are used by the natives when speaking their own language, and not with words or phrases used in Pidgin English, such as

I fit go make um

He live for die

I find um I no see um

I am able to do it.

He is very ill.

I have looked for it but could
not find it.

Three preliminary phonetic principles have to be noted, for they provide the key to the majority of the word-changes which have taken place. The *first* is that the letter "r" at the end of a word has no sound in Standard English; thus the native both pronounces and writes my name "Tela." The *second* is that the native is not accustomed—not that he cannot, for any normal person can produce any sound, however strange, uttered by another normal person—to pronounce together two different stops, *i.e.*, P.T.K.B.D.G., and only rarely uses a stop preceded or followed by a continuant, nor does he like to end off a word with a consonant; so, for example, in "milk" the "l" is followed by a vowel and the word becomes "milik." Similarly

store becomes sitó; bucket becomes bákiti;
cook „ kuku; mail „ meli.

This gives occasion to digress and remark on the spelling of the Hausa word for "king," whether it should be "sarki" or "sariki." From the way I have heard it pronounced it should be written "sarki." Originally, perhaps, it was pronounced "sa-ri-ki"; but it is a general philological tendency in trisyllabic forms to make a long accented syllable overlong at the expense of the vowel in the following syllable, and eventually to cause it to disappear; of English "general" and "medicine," with their respective pronunciations, "jenral" and "medsin." Certainly one occasionally hears a rather marked glide between the "r" and the "k" due to the rolling of the "r"; and it is this which caused Canon Robinson to say, "In connection with liquids a parasitic vowel (*sic*), generally assimilated to that of the syllable, is often introduced"! The *third* is that the native seems to prefer a continuant to a stop.

One of the most frequently heard words is "Likita," which, except for two letters in common, seems to have no connection with the English "Doctor." The processes which have produced this form are :—

(1) The stop "d" and the continuant "l" have interchanged—a regular phonetic feature of the Fulani language;¹ cf. also our "dodderly" with the German "lotterig."

(2) "O" is a difficult and hence an unstable vowel; and in any case it is far easier to utter a high vowel, i.e. "i," after the high consonant "l."

(3) The two stops "k" and "t" have been separated by the simplest of all vowels, the short "i."

(4) The second "o" in "doctor" is not an "o" sound at all, and it is written in various ways in English, e.g. "over," even in "Society English" it is often lowered to the "a" position, e.g. "ovah."

(5) The native heard no "r" and so did not articulate one.

In Canon Robinson's *Hausa Dictionary* will be found the word "Amasai," meaning "haversack." Without any reflection on the British N.C.O.'s pronunciation of our word "haversack" the native soldier, in his attempt to pronounce it, dropped the "h" and changed the "v" into "m." The transition took place thus. There is no "v" in Hausa or in pure Fulani, although it is heard in the debased pronunciation of the Fulani "w" (nearly the same sound as "hui" in French)—e.g., "O vi" for "O wi." It is difficult to pronounce the voiceless form "afersack," and so he took the "stop" form of "v," which is "b." Cf. Havana and Habana, avoir and habere. But he is generally averse to stops, and, lowering his velum, he opened his nasal passage and made it into "m." For the opposite process compare the attempt of the Britisher with a cold to say "Good morning." His nasal passage being involuntarily closed, he cannot produce any nasal sounds and simply says "Good bordig." The "sack" then proved difficult, but, instead of

¹ See my *Fulani Grammar*, Chap. I., para. 13.

making it into two syllables by adding the usual "i" (sacki) he went one step further and eased it off into "sai"; and so "haversack" became "amasai."

In Von Stephani's *Fulbe-Taschenbuch* one finds "tafirta" given as the Fulani word for "dolmetscher," whereas it is only our word "interpreter" in disguise. The tendency is in all languages for unaccented syllables to be weakened, and in the end to disappear; which accounts for the loss of the "in." The stop "p" and the continuant "f" have interchanged, of "pater" and "father." Unless the "r" is well rolled after "f" it has not much sound in unaccented syllables, and so our word "interpreter" usually becomes in the mouth of the native "tafita," and not "tafirta," though occasionally one hears an individual who seems to transpose a mild "r" to a position in front of the "t."

If one may digress, there is an error in this same book—an error common to many others also—which illustrates the great care which pioneers investigating a language must take to be certain that the natives understand what is in their (the pioneers') minds. Stephani states that the Fulani word for "silver" is "halagare," whereas "halagare" means a ring, and the word for "silver" is "chardi." It is quite logical to deduce that the German was collecting the names of the various metals; he had possibly already written down "iron," and, pointing to the silver ring on his mallam's finger, asked, "What is this?" expecting of course the answer, "silver," whereas the matter-of-fact native told him that it was a "ring."

Apropos of this, I have been told that an early map of Southern Nigeria had one portion of it well dotted with the Yoruba name for "market," the explanation being that the official who surveyed that part had often made his halt near the market, and on asking "what is the name of this place" (meaning the village), had been given the answer, "that is the market." That may be as it may, but I can vouch for the veracity of another story of this kind. One day at the beginning of this tour my wife greeted me on my return to lunch with the glad news that she had got a new word for my dictionary. She had been out in the bush and had dis-

covered a flower, and naturally asked the boy what it was called: there was much laughter when I told her that what she had written down was merely the Hausa for "bush-flower."

But to return to the main subject. I once saw a letter addressed to "Kafin Kufa." Perhaps the uninitiated who are gifted with the powers of Sherlock Holmes may be able to deduce what the English forms are! Both "k's" are only the phonetic form of "c"; both "f's" must be replaced by "p's"—which gives us "Captain Cooper." The "t" is missing because the native does not like two adjacent stops; but because he lengthened the "a" he compensated for it by dropping the second stop instead of interpolating a vowel. This word is one of the most frequently heard in the river districts, for every little barge and steamer has its "kafin"; and the oftener the word has been bandied about by uncouth lips the more the reason to find the English form so mutilated.

Another common word along the Niger and Binuwe is "kwatta," meaning primarily that part of the river bank which the Europeans use, but also apparently including any part of the riverside. It seems natural to derive the word from "(the European) quarter," for in the early days the traders who opened up the country lived in hulks on the river; but from what I can gather the traders themselves did not use the word "quarter," which makes one seek another source of derivation.

A rather extraordinary phrase which has crept into Fulani is "o wadi rangardi," meaning "he has gone away for a few days." "Wadi" is a pure Fulani word meaning "made," but "rangardi" is a word used by the native soldier meaning primarily "the day (Hausa "rana") he goes on guard," and so connoting being away from barracks for the night; and then the idea was extended to any short absence from home. Similarly the soldier's name for his barracks, "bariki," has had its application extended to include rest-houses, and sometimes even a European station as a whole.

Another curious combination, used chiefly by the Hausa soldier, is "buga wai'a," literally, "hit the wire," meaning both "to telegraph" and also "to pass on a message by word of mouth." In fact the soldier seems to be responsible

for the incorporation—and mutilation—of many of our words into his language. His corruption of the names of the parts of his rifle and machine-gun are really wonderful, and are absolutely unintelligible to the young officer just out from home. I have spent many hours listening to the native sergeant (which has become “saji” amongst the W.A.F.F.s; a corporal, by the way, is “mai-igiaya biu,” the-one-with-two-chevrons), rattling off these names with amazing rapidity, and it has caused me much regret to find that I have lost the list which I had jotted down. His word “Krutata” is indeed interesting. It is the plural form of “krutu,” which is the mutilated form of “recruit.” Similarly “bugiloli” is the plural form of “bugila,” the English spelling of which is obvious. From these examples the original of “Helmomi” will be readily deduced. The Fulani have put their own termination to the singular as well as to the plural, so that “headman” is “helmājo” and “headmen” “helmā'en”; but they have no excuse for adopting this word, for they have exactly the same idiom in their own language, to wit, “horejo,” “hore” meaning “head,” and “jo” being the personal ending.

Connected with “headman” is “labourer,” which becomes “lebra,” and his tools, “digga” and “shebur.” He has taken the English word “digger” and has applied it to the “pickaxe,” but “shebur” is the result of phonetic processes. The change of “b” and “v” have already been shown, and “r” and “l” are also regular phonetic interchanges, of Salisbury and Sarum, ager and agellus, which reveals the English word “shovel.”

As the natives had no coins before our advent—they used cowry shells or a system of barter—it was only natural that they should adopt our names for such coins as we have introduced, with a few exceptions.

Pound=fām or pām. Florin=fataka. Shilling=silli or solli. Sixpence=sisi. Threepence=toro. Penny=kobbo; but halfpenny=penni, or sisin-kobbo. Tenthpenny=anini.

Pām (fām) is perhaps the most interesting of all these changes, if one may be allowed to take the other meaning of “pound”=“beat up,” for the purposes of analogy. The

Mid. Eng. form was "pounen"; but the velum being raised too soon the "d" sound crept in, and so the modern English form became "pound." But the Nigerian natives, especially the Fulani (and the Yoruba), are well accustomed to uttering nasal sounds, and, instead of raising the velum for the "d" sound, continued with the nasal passage open, with the result that the "d" was lost, and the word regained the old English form once more—except that the vowel sound had been modified. But "paun" is a difficult word for the native, and so he eased it off by monophthongising the "au" into "ǣ" (the sound of "u" in "but") and labialising the "n," which gives us "pām."

The origin of "fataka" I do not know. A "toro" is said by some to be used sarcastically, as "toro" is apparently an epithet of an old bull elephant. "Kobbo" is, of course, our word "copper"; while "sisin-kobbo" owes its origin to analogy: "sisi" is half-of-a-shilling, therefore half-of-a-kobbo is "sisin-kobbo" (the "n" being the Hausa genitive). "Anini" is also the name they give both to a button and to an officer's stars. By the way, an "ofsa" is always a lieutenant. Ninepence they often call "nai" (similarly they call "line," "lai"), which is rather disconcerting at times, for "nai" is also the Fulani word for "four," and when one asks, "How much is it?" and is told "kobbo nai," one has to ask again to see if the man is speaking Fulani or Hausa! Three-halfpence is called "hafu," being "half" of threepence. The Maria Theresa dollar, now only rarely seen, is called "gurus," possibly from the Arabic "gurushu," a piastre.

It was stated at the beginning of this article that the simplest thing for the native was to adopt the English word for a new thing. But he has not always done this, for occasionally he has, and with commendable appositeness, coined a word to meet the occasion. One of the outstanding examples of this is the soldier's name for a machine-gun, which he calls "mai-ruwa," literally "the-one-with-the-water"; the reason is obvious, and not "because it emits steam," as one writer put it. The Hausa "a kawo" means "let it be brought"; hence it is the name he has given to the

native clerk in European employ, to whom the official is (always) calling out, "Bring me so-and-so, Mr. —."

On the other hand, there are occasions when the native has not coined a word, but has applied one of his own existing words to the British introduction. A typical example is "Jirigi," which in Hausa means a "boat," but has also come to mean a "train." When in East Africa the Nigerian soldier went a step further and called an aeroplane by the very appropriate name of "jirigin-samma" (sky-boat).

F. W. TAYLOR.

WHO WERE THE MANES? *

(Concluded).

It is generally recognised that the Mendi language, which at present is grouped with the Mandingo, differs widely from the typical members of that group; the usual explanation is that it has been metamorphosed into a Mande tongue, but is not genealogically akin to Mande; that suggestion I accept. It has also been asserted that it originally belonged to the Coast group—*i.e.*, to the Bullom—Temne—Limba peoples: it is quite possible that I have said so myself. However that may be, I now reject that explanation *in toto*. It is due, perhaps, in part, to the fact that Kisi, which is a member of the Coast group, is suffering the same fate as Mendi; but when we look at the scanty records of Kisi, we note an important difference in the morphology. Mendi has only two plural forms, definite and indefinite; Kisi has a number of plural suffixes; but it is not clear that there is determination in the language, though it is probable.

A comparison of the languages does not suggest that they are akin; in fact, Koelle put Mendi and Kisi in different groups.

* *Corrigenda*.—Before I again return to the question of the Manes, there are certain corrigenda in the first portion of this paper to which I must allude. Some are the result, in part, of my handwriting. (a) On p. 186 the word *masheer*¹ suggests a totally unwarranted argument; the point of the note is the use of a horn by both societies, not any fancied etymology; I may add that I did not italicise the word. (b) On p. 184 in the footnote, the second half of which refers to the map on p. 179,² occurs the word "Seser"; this should of course be "Serer"; the title of my work should be *Anthropological Report*. (c) These typographical errors are, however, trifles by the side of a blunder on p. 176, in which I am made to refer to the Relation of the Jesuit Jarric. The author of the Relation, edited by Guerreiro, is not so far as I am aware, known; it is certain that it was not Jarric, who did not visit Africa and who wrote in French, as was natural in a professor at Toulouse.

¹ The word should be *masker*.—ED.

² Two Maps illustrated the first instalment of this article which was published in the April, 1920, issue. They will be found on pages 179 and 185.

A second reason for assigning Mendi to the Coast group is that it is geographically the nearest, and seems the only possible group; perhaps the fact that Mendi is swallowing up other members of the Coast group, like Krim and Bullom, has also counted for something in the matter. However that may be, the hypothesis is a guess and a pure guess. I append a table of (a) human beings, (b) names of parts of the body, (c) of weapons and (d) of foods and items of general culture. They are not, of course, selected at random; such a course would be impossible; but they are a not unfair statement of the case.

There are several dialects of Mendi; and I quote Koelle's¹, of uncertain locality, with an L. against a word that appears to be Loko; I also add parts of my own Gba Mendi vocabulary. For comparison I append (3) Mande, (4) Mampa or Bullom, and (5) Kisi.

I recall briefly my theory as to the relation of these languages. Mendi is a Manes tongue, that influenced Gbandi, Gbese and Toma, and was itself incorporated into the Mande group as regards syntax and a portion of its vocabulary. Loko is a Sapes tongue so deeply influenced by Manes that its original affinities are lost; occasionally we find Temne words in it, *e.g.*, *pampagai*,² parrot; but they are too few to permit of argument. Loko may have been an isolated tongue like Limba.

Mampa is a coastal group language, now losing its prefixes and also disappearing before the advance of Mendi. Kisi is also an original member of this group, but is passing over to the suffix languages, perhaps under the influence of the Mandingo group, which is here represented by Mande.

Word.	<i>Mendi</i> (K).	do, <i>Gba</i> .	<i>Mampa</i> .	<i>Kisi</i> .	<i>Mande</i> .
elder brother:	ndewa	—	pente	bendo	kodo
friend:	mbara (L)	ndiamo	temba	dšabu	kaninoro
stranger:	hota		nyano	mial	londan
chief:	maha (L)	mani	be	maha	mansa
slave:	nduo (L)	ndowe	wono	{ keo (N.W.T.) dšo ndua	

¹ I retain his transcription unchanged.

² *Pampagai* is Portuguese.—ED.

Word.	Mendi (K).	do, Gba.	Mampa.	Kisi.	Mande.
head :	ngu	ngwi	bol	boli (ñ)	ku
hair :	ngundere	ngundie	udirin, izemen :	yinde	kunsi
face :	tawa, berawa		tuhole	hola	nya
eye :	nyahu (L)	ngami	tuhol	hoten ¹	nya
nose :	hogba (L)	hobe	min	milindo	nu
mouth :	nda		nyen	sondo	da
tooth :	ngongoru	ngongoli	ndšian	kinde	nyin
arm :	toko		pia	(ba)	bula
blood :	nama (L)	nami	nkon	koan	dšeli
pot :	fe	pove	youtu	gbeng	dara
spear :	gbara	gba	bal	ballo, saki	tamba
bow :	kera	ndibe	so ²	kiewo	kala
arrow :	ndegba	fa	ke	belnden	binye
war :	ko	kq	neme	jowo	kele
sky :	ngele		nšelo	naikende	aridšenne
fire :	ngombu		dšem	nyinden	ta
water :	ndša (L)	nje	men	mendañ	dši
gold :	kani		ndon	kanie	sani
iron :	koru		etu	kilende	neru
moon :	ngaru	ngawi	ipan	pange	karo
canoe :	ndende		wom	dendq	kiye
yam :	mbole		koe	tomboi	ku
rice :	mba		pele	malon	male
cassava :	tanya		yeke	yambalen	banta
goat :	nge		ikulun	twindo	ba
				(kulindo)	

¹ or holen.² here is also used.

This list falls into four sections; in not one of these is there any relationship of the Mendi to the Mampa vocabulary; there are a fair number of correspondences with Mande, so that if the lists prove anything it is the Mande origin of Mendi; but the differences are no less important, so that we may regard the identities merely as evidence of borrowing. In five of the cases in question, out of a total of eight, Mendi has prefixed a nasal; the same tendency is also observable if we compare a Mendi vocabulary with Kisi, or indeed any other; the proportion of words beginning with "n" is remarkable. *Primâ facie*, therefore, such Mande words as have been taken over by Mendi have undergone prefix change, though the genius of Mandingo in its present stage lies in the direction of suffixes. There are, it is true, traces of the same prefix in other languages of the Mande group; but it is also true that the suffixes, which are numerous, show considerable affinity with Bantu suffixes; it is therefore beside the point that the "n" prefix is found in Mande; in

any case Mendi appears to use it far more frequently than the other languages.

The comparison with the Kisi words shows no striking amount of resemblance; with Mampa the kinship is even more remote.

So far, therefore, as vocabularies can prove anything, Mendi has not been a member of the coast group, and is only a late addition to the Mande family. The most striking fact about the vocabulary is that, among words connected with war, only one is related to the Mande word, and that one word is replaced by a different term in the Gba dialect. This is precisely what we should expect if Mendi is really the Manes language, changed by centuries of association with alien peoples and subjected from the first to the influence of women of other tongues, whom the invaders took as wives. In practically every department such women might introduce words of their own speech; but they were least likely to do so in matters connected with war, and it is precisely here that the records show Mendi to be most remote from the surrounding tongues. So far, therefore, as the language test goes, the theory I have put forward passes triumphantly. It is naturally only negative evidence that such a test can give; it would be too much to expect that the sister tongue of the Mendi should have survived and been recorded. We do not even know where to look for the ancestral home of the Manes.

I now revert to a point mentioned at the outset, which, if the Jesuit father's information is correct, will prove to be of the highest importance. He tells us that the old chief was present at an attack on Elmina, which the Manes assaulted in the course of their ten years' pilgrimage. We can hardly suppose that the chief was aware of the Portuguese name of the place; and it is unfortunate that his exact words are not available.

Elmina was founded in 1481, but not finished till 1560 or so; but no doubt guns were in position long before the latter date. Axim was built in 1502, but abandoned twelve years later. In our ignorance of the exact date of the Manes' invasion, we do not know whether Axim was fortified at the time

of the supposed attack; but the two places are not far removed one from another, and the point is relatively unimportant.

If we could be certain that the old chief, without any prompting and without knowledge of big guns, spoke of the fire of the forts, we should have no other course but to accept the view that the Manes did actually attack one of the only two fortified places on the coast; but in the course of the subsequent hundred years the chief probably had opportunities of seeing and hearing ships' guns, though he might not realise that a land fort could be equipped with them. Everything, therefore, turns upon how far the Jesuit narrator primed his informant, of course unintentionally. Doubtless if he had realised how anxious we should be to know, he would have been more explicit.

Taken in conjunction with the evidence as to the use of the *konten* in Togoland, there is, however, a certain amount of probability in the story. After all, we have evidence of migrations quite as lengthy in other parts of Africa; and the detail about the ten years' wanderings is artistic if not veridical; such nomadism is quite contrary to the negro habit of life, at any rate of our own day—that is, of course, a point in its favour.

We are told in the Relation that the first point where the Manes came in contact with the Sapes was near Cape Santa Anna. The chronicler says: "O primeiro encontro que teve esta gente sahindo da Costa da Malagueta, entrando pelos Baixos da Sant' Anna, que he a primeira terra dos Sapes, vindo por aquella costa, foi com hum rei Boulaõ." If this passage referred to Europeans we should unhesitatingly interpret the reference to the shoals of Santa Anna as meaning that the invaders came by sea. The view of the Jesuit father himself was that the Manes were invaders who came by sea; in another connection he refers to them as embarking and disembarking. We are not accustomed to regard the negro as a seaman, though the Kru boys of our own day are renowned; and in Sierra Leone big canoes, carrying 120 men, were not unknown (*Abh. Bay. Akad.* IX. 1, 133). We have read of the Baga voyage westwards.

On the Gold Coast the people of Akra, Late, Obutu, Asabu,

etc., were said to have come up from the sea and some of them are related to have returned the same way in times of defeat.¹ There is therefore nothing impossible in a migration by sea. It not only explains the reference to an attack on Elmina, for the wayfarers would probably provision themselves on the road; but it makes clear how they evaded the powerful kingdom of Benin, which in those days extended to the Gold Coast (Römer, *Efterretning*, 1660, p. 16), where emblems of their power more than a hundred years old were in existence in the seventeenth century, in the shape of the horsetails carried by the generals or viceroys and handed down in their families as precious heirlooms. In the same way I saw in Asaba, on the banks of the Niger, a metal object that was left by the Edo on their last expedition, which was certainly a century earlier, if I am not mistaken.

A land journey would of course present greater difficulties; but even these would not be insuperable. It is clear that the delta of the Niger would be impassable for a large force, though with guides they might advance by water. If it were not that the kingdom of Benin would apparently impose an iron barrier against invaders, we might, however, even bring, in theory, our invading Manes by land from the other side of the Niger. At a point above the delta there is, for some seven miles, a series of shoals and sandbanks, nowhere more than two feet deep when I passed up in the middle of the dry season a few years back.

The sands of African rivers are treacherous. Near Obu, in the Awka district, there are two rivers, one of which issues from a lake close at hand, where quantities of waterfowl are found; this is spanned by a bridge; the other runs a longer course and passes over quicksands, which extend on both sides of the river to areas quite free from water. The incautious hunter may plunge thigh-deep into this sand before he is aware that he is not on real *terra firma*. The river is passable only at one spot, or perhaps two in its upper waters, at any rate for human beings; lower down it joins the other river, and their united waters run over small stones, a clear, inviting stream, easily fordable. Antelope, however, especi-

¹ C. C. Reindorf, *History of the Gold Coast*.

ally *cobus cob*, can cross the sands and the river at any point, and from my camp on Obu hill a mile away I have often watched these animals plunging through the water, lifting their legs high in the effort, but never in any difficulties with the quicksands.

I do not know whether the Niger shoals are of this nature or not; but in any case it would be possible, by taking some risks, to ford even this great stream, at the point indicated.

Possibility is not performance. I must not be understood to argue that the Manes actually came by this route, or by any other, from beyond the Niger; I am merely exploring possibilities. Certain data have to be accounted for, and prepossessions count for nothing when it is a question of working out a problem. It is *primâ facie* immensely unlikely that the Manes came from a far country; but we have the statement that they were ten years on the road (not on the march, be it noted), and we have a fragment of evidence that suggests the presence of their culture in Togoland. They are said to have assaulted Elmina and to have entered Sierra Leone from the sea.¹

Here, it seems to me, our data are at an end. There is nothing to connect the Manes with the Jagas of the Congo, to whose power Avelot assigns the kingdoms of that area, Lunda, Bayaka, etc. He suggests that they spoke Masai; in any case that their tongue was harsh and guttural, probably non-Bantu; its influence might still be seen in the tongues of West Central Congoland.²

I do not profess to be able to form a judgment on any of these points; but the mention of the languages of this area

¹ If they came in by land, it is not clear why they hugged the coast; though the forests would doubtless be less dense and the sea would give them a harvest of fish when other food failed.

² The meaning of the author is not clear. If Captain Avelot really suggested that the Jagas (the modern Bajok or Vachokwe people) spoke Masai he of course was wildly in error. There is a certain rough utterance—consonantal terminations—in the tongues of Western Congoland, but it is due to ancient Semi-Bantu—not Nilotic—influence, the speech of the Jagas was the modern Chokwe language which is far from being harsh. . . it is average, harmonious 'Bantu.' The resemblances in roots between Temne and Heréro (p. 20) are only part of the general affinity of Temne (Semi-Bantu) with the Bantu family.—H. H. J.

suggests a point of interest, though the subject is remote from the theme of the present paper; I merely touch on it to prove that we have to reckon with great migrations in Africa, though that is perhaps in no need of proof.

A comparison of Temne and Herero shows that they have a considerable number of words in common. I append a few examples :

<i>Word.</i>	<i>Temne.</i>	<i>Herero.</i>
saliva	mantes	omate
fire	nant	ohande (spark)
dung	yanyan	otyanda
fat	maro	ombaro
moon	nof	on'i
name	nes	ena

I do not suggest that these resemblances have anything to do with the Manes' invasion; on the contrary, it seems probable that the result of the invasion might be to efface traces of kinship with Bantu tongues; for there is no trace of such resemblance in Mendi, which would, on my hypothesis, be closer akin to Bantu, if the invaders were of Bantu origin or relationships. All I intend to show by this brief list is that language kinship is possible between tribes apparently too remote for possible contact, which must nevertheless, if linguistic evidence is worth anything, have been the cause of the resemblances.

If that is so, it is clear that we have a wide field for investigation when we undertake to look for affinities to the original Mendi tongue, *i.e.*, that portion of their language which does not resemble the speech of their neighbours.

It is worthy of note that the language quoted above, Temne, was spoken by a people of whom the following custom was recorded early in the sixteenth century; when they bury an important man, they open his side and take out the entrails and wash them; they fill the body cavity with herbs like mint and also meal and rice; they rub the body with palm oil. (*Abh. Bay. Akad.* IX., i., 133.)

An Egyptologist would not hesitate to refer the practice to Egypt; but the scene of it was distant not less than three thousand miles from the country which we regard as the original home of the art. I do not suggest that there is a case for bringing the Temne from Egypt; but I do suggest that, though

facts must be well established before inferences are based on them, bold hypotheses are better than an ostrich-like policy of refusing to look facts in the face. I do not claim to have done more than justify the Manes=Mendi equation and to have made probable that they came by sea, at any rate to the coast of Sierra Leone. The linguistic affinities of the Manes and their original home are problems to be settled by further research, not only at home, but in the field. In 1914 I proposed a Freetown ethnographical museum, which was officially declared to be a matter of no urgency. Such a museum, created a hundred or even fifty years ago, would contain collections of priceless value to-day. Even now the essential cultures of the different tribes can be made accessible to students and remain a memorial for all time. The cost would not be great, and the chiefs of Sierra Leone are probably sufficiently alive to the value of preserving historical records of native culture to give all assistance in their power. Arranged on a geographical basis, such a collection would stimulate local patriotism to make a good show and at the same time be the most suitable method of display. If such a collection were available to-day, I might be able to point to the original home of the Manes, founding my theory on a comparative study such as has been made, on the basis of the Berlin collections, for other parts of the world as well as Africa. We can hardly expect the Berlin collections to grow as they have done in the past. All the more reason, therefore, for taking up their task so far, at least, as our own colonies are concerned. If we do not do so, our posterity a hundred years hence, at any rate the anthropological portion of it, may deplore that Germany did not win the war and provide them with the collections that will then be no longer obtainable.

N. W. THOMAS.

POSTSCRIPT.

Since the foregoing was written a certain amount of additional information has come to hand. I add the gist of it without discussing the implications.

(1) Major Braithwaite Wallis sends me two interesting and important notes: (a) he has seen the *konteh* in use in the

Mendi country; (b) there is a Mendi tradition that they came from the north-east.

(2) The Temne names for Mendi and Mandingo are Amani, Amanika; but a portion of the Temne area is called Ro-Mendi. In a compilation by J. H. Moore I have found the statement that Mendi means "lords of the soil"; but so far I have failed to discover the source of the information; Moore's statements are not free from ambiguity.

(3) The Fang appeared in Gabun about the same time that the Manes conquered the Sapes; they probably came from the neighbourhood of the great lakes. We do not know what their original tongue was, for they now speak a Bantu tongue. The Manes in their wanderings added to their forces the men of many conquered peoples, and it cannot be assumed as axiomatic that they spoke a homogeneous language; even if therefore we can by analysis distinguish the non-Mande vocabulary from the Mande, it does not follow that any clear indications could be gathered from it. The Fang and Manes migration may be (a) part of the same movement; (b) one may be due to the other; (c) they may be wholly independent and synchronise only by accident. Our data throw no light upon which of these hypotheses is more probable.

(4) I have noted above some *corrigenda* for the first half of this paper. To these should be added that map I. is not, so far as I can see, "after Köpke"; it appears to have been redrawn from another map; in the process the river Mitombo has been identified with the Scarcies instead of the Sierra Leone, and the three tribes to the west of it, together with the name "Serra Leña," correspondingly shifted to the west. My note to the map referred to the one published by Köpke, not to the sketch which appears with my article.

[*Editorial Note.*—It is a little unfortunate that in these two interesting and suggestive articles on the "Mane" peoples, the author should have applied the English plural "s" to the terms *Mane* and *Sape*. It may confuse the reader as to their root form. The origin of the cognate terms Mali, Melli, Mande, Mendi, Mane and Madi is described on page 1090 in my work on *Liberia*.—H. H. J.]

“MULOMBE” : A KAONDE SUPERSTITION

THE following notes give details of one of the most interesting superstitions that has come to my notice; and, further, they refer to “that” which is held in the greatest awe by the tribe concerned (the *Ba-kaonde*, located in the north-west corner of Northern Rhodesia, a tribe of the *Luba* family). The details, which were acquired with difficulty, were furnished under a pledge of secrecy as to their origin; and I have tested them sufficiently to believe in their authenticity. Hints in court showing knowledge of the nature and habits of the *mulombe* have caused something approaching consternation, and references at odd times to certain items recorded here have given rise to genuine fear in the listener.

The *mulombe* is also known as *mulolo*: an archaic and probably the most correct name is *Sung-unyi*, but this last is rarely used now. It is a snake with a man's head, made by certain wizards, that kills the people indicated to it by its owner. This is how it is made: A man wants to own a *mulombe*, probably because he wants to be rid of some enemy in a secret manner; he therefore goes to a wizard who has the reputation of being able to make one; and if the wizard agrees to oblige him he is directed to get five duiker horns. Having returned with these, the client is escorted into the bush by the wizard. The wizard then collects certain medicines, which he places on a piece of bark, and mixes with water. He then puts the five duiker horns near to the concoction; after which he proceeds to pick some spiky grass (*luwamba*) and plaits it—the plait is from 15 to 18 inches long and from $\frac{1}{2}$ to 1 inch wide. At one end of this plait he places the five duiker horns. Parings are then taken from the client's fingernails and are placed inside the horns. Incisions are next made on the client's forehead and chest, blood from which is put in the medicine. It is then all mixed together, and a part

of it is given to the client to drink. The plaited *luwamba* is then laid upon the ground, the horns pointing away from the wizard and towards the client. Another plait of *luwamba* is then made, which is dipped into the remaining medicine, and the medicine is thus sprinkled by means of the second plait upon the first plait, which is lying flat. At the first sprinkling the prone plait changes into a white substance (the colour of white ashes). At the second sprinkling it becomes a snake. At the third sprinkling the snake develops the head, shoulders and arms (in miniature) of the client (later the shoulders and arms disappear), the rest remaining like a snake. It has also, reproduced in miniature, any ornaments that the client may be wearing on the parts reproduced, such as a bangle, necklace, shell, etc. This is the *mulombe*. It rears itself upon its tail and addresses the wizard's client.

Mulombe: "You know me, and recognise me?"

Client: "Yes."

Mulombe: "You see that your face and mine are the same, and that your necklace and shell (or whatever the ornaments may be) are the same as mine?"

Client: "Yes."

Then the wizard chips in.

Wizard: "There is the *mulombe* that you asked me for: take it and tend it carefully. You may keep it where you will—in the reeds by the river (the usual place), in your hut, or wheresoever you wish. It will always be with you now, and so long as you treat it well, so long as it be really well looked after, you will not die—until all your relatives be dead; so tend it carefully. Farewell."

They then separate, the client taking his *mulombe* with him and the wizard departing upon his own lawless occasions.

Before long the *mulombe* says to his owner: "I want a person to 'eat.'" The owner then has to indicate a person whom it may kill. After the kill the *mulombe* comes back very happy and crawls about its owner, licking him all over; which licking makes the body very clean and the owner fat and sleek. It is not long, however, before the *mulombe* gets "hungry" again—hungry for killing, that is, for it does not really eat the victim, in fact it leaves no mark; but the expres-

sion “ eat ” is used—and another victim must be indicated. The owner, if he refuses to indicate a person, becomes ill, and will not be cured until he gives way to the importunities of his *mulombe*. Provided that he keeps the *mulombe* in victims as demanded he will live and wax fat until all his relatives have died.

But—and here is the fly in the ointment—it probably happens that owing to the numerous deaths that have occurred because of the insatiable appetite of the *mulombe*, the people get suspicious and call in a diviner to ascertain the cause of the trouble. The diviner, generally by bone throwing, finds out that someone has a *mulombe*, and also divines where he keeps it. No hint of this is allowed to reach the man implicated, who—all unsuspecting—remains happily in the village. Then the diviner chooses five strong men and guides them to the *mulombe*’s lair—which is almost invariably near a river. Arrived there he takes some medicine, previously prepared, and sprinkles the adjacent ground with it; rumblings ensue, and water comes out of the river, rising till it reaches the thighs of the men. Then fish come out in large numbers, followed by crabs; and finally the *mulombe* itself, rearing itself upon its tail. A poisoned arrow, prepared and brought in readiness for this climax, is fired at it, and the dread thing falls writhing to the ground. Simultaneously the owner, in the village, feels as if he had been shot with an arrow, and he also falls writhing to the ground. Soon the *mulombe* dies, and at the same moment the owner dies. Thus are the victims avenged and the deaths in the village cease.

AFRICANUS.

SOMALI SONGS AND LITTLE TEXTS

XI. DEPREDACTIONS OF SULTAN YÛSUF 'ALI'S SOLDIERS.

IN the song that follows the poet, a native of Qólli (a place with wells on the littoral of the Sultanate of Obbia) laments with Sultan Yûsuf the spoliations committed to the damage of the clan of Hawiyya, inhabitants of the country, by some soldiers of the Sultan, disembarked at Qólli from a canoe.

Text.—márkab ġġäy ġórihi Hobyôd Qólli ġüdihiisa
 meši ħusûs ū ġú faddiyáy ġoláda rër Yûsûf
 ġaúlki la sô yirí áskari ġádán karí wäydáy
 kú ġamáme ġoláda ħnu naháy ġóys haddí la arkó
 wán ū ġalay ġabáu-nô ġú daráy ġáfána ū sôráy
 ē ārġi haddáy na ġá ġaşēn ġáta hareġġisi
 aúrki bíya nô ġādí ġiráy sárta ġalabkôda
 na ġá ġáté Qaúlo ðaşay íyyo Qolásta irmâne
 boġoró mahán la ġú ġoslá la † ġa ġá ġādīe
 ô maháy málka ku lá ġaybsadán la † ġa ġá ġādīe

Translation.—[1] Smoked a wooden boat of Obbia in the interior (roadstead) of Qolli. [2] It stopped in a chosen place among a noble clan of Yûsuf's people. [3] (But) the soldiers have not executed the orders. [4] I complain that we are a noble clan if they look at the huts. [5] I have slaughtered a calf; I have added cold water (to the calf) and given it to the horse-flies (viz. to the soldiers) to eat. [6] In return they have slaughtered our sheep and (even) taken away the skins! [7] On camels that carried water for us they have loaded their baggage. [8] They have taken away Qaulo (the she-camel) in child-birth and Qolasta (the she-camel) full of milk. [9]

O King, why scoff and rob me? [10] and why must they divide among themselves the riches they have taken from me?

Notes.—I am not certain of the meaning of the word “*gamam*” in verse 4. If the explanation given by my informant is right, the verse means: “I am sorry we have some fine huts, a fine village, because these soldiers, seeing our dwellings from afar have desired to come here!” Qaúlo and Qolásta (v. 8) are names of she-camels (see note at song VII).

XIA. SPECIES OF WOMEN.

This interesting song was composed by a Marrehan minstrel, named ‘Anšúro. For its poetical form it seems of the best Somali poems:

Text.—súgda gabáy ‘Anšúro bárlayahās sár ū má gādēne

tán íyyo sabán horéna wà-ni ū gú salügtēne

haddán mánsa lô surumadāyn wā sibsibatāe

sāhibāyó î magál tēhda na gá sugāysín

5 hadda idínku haláy sēhatáy láy salahaníya
sóddon wāye nāguhú mahán ka lá sífēn wāye

saddēhdi wallāhōd ínan ka lá seháyaye

in kást-ō suldán ḍaláy ‘armalí sáfi la gá wāye

aníga sirtēdi bartá mahā-yyo sārkáyya

10 hábba wāyn sinnáda ḡōgtáy ō ḍábanku sún yār

kól haddí sibrár nás ku yaháy mahā-yyo sārkáyya

garbihēda míddi míddi subak-ku yál wáda sanúnāysa

ō usgagēdo wā sída súnko mahā-yyo sārkáyya

nāgāha míddi gāban ō gilihsan ō fól humá

15 ō ídifku gamelā yaháy nō géyan ma ahá

gárba síban láy kól haddé gorāya sāytāysán tahay
mahā-yyo sārkaýga

sídi gēl Bullála ū sāftó ō ságal gu ēgayá

āma wílál-lánto ū so’dó sédda rēr bogór

āma ‘olúma saúdki siddá ō hāḡki ū sayáhaysá

20 gabáḍḍa wárkēda donyúhu sidsidín

âma yêrâhê mël saré ka ðalán mahâ-yyo sârkâyga
 ðêhdo ô sîriga labadêda sabârti lá ka lá so'áy

lég sūbána sayddáda ga'néd tíma sawahíma
 sán garôr lá ěgáy íyyo ilkáha súfka la gá yêlǎy

25 kól ūm-bâ sâhaó hū na sì sūban lô bogáyē

Translation.—[1] "In these mornings 'Anšúro has no more played in the paths of poetry; [2] yet in the past he did not scorn (the song). [3] If poetry is not guided rightly, it wanders vainly: [4] O my friend, listen unto me! Don't delay the song to our harm!" [5] You have so caressed me in the night whilst I slept. [6] Infinite (literally: "thirty") are the types of women. Why can I not describe them? [7] O the three "By God!" I will show them! [8] In any case even she, whom the Sultan has produced, a woman without a husband a modest one is not to be found. [9] I know their cunning; which (of them) will be my joy? [10] The mature girl, who has lived years, and who has furrowed cheeks, [11] and is as if little skin bags were used (by her) as breasts! Which (of them) will be my joy? [12] Another, because of the melted butter on her shoulders, stinks, [13] and her dirtiness is like poison! Which (of them) will be my joy? [14] Another is short, swings herself and has ugly look; [15] her dirtiness is the refuse; I am not drawn to her! [16] Another has lean shoulders, and is as when the ostrich is bound by the feet. Which (of them) will be my joy? [17] Like the camels that at (the wells of) Bullala array themselves, and . . . [18] or like children who go and sing satirical songs to the relations of the king's family, [19] or like the learned who raise their voices and begin the pilgrimage; [20] the fame of the girl is brought by the ships here and there; [21] or they cry that she is born in a high position. Which will be my joy? [22] From her thin waist her hips are splendidly divided, [23] beautiful thighs, swinging hands, silken hair, [24] admirable nose, teeth like white wool! [25] O right Lord, give us at last the beauty we have chosen!

Notes.—After a short prologue, in which the poet reports the speech of his friends who have pushed him to sing, 'Anšúro describes some kinds of women whom he does not want: the woman without modesty (v. 8-9), the spinster (v. 10-11), the

unclean (v. 12-13), the short one (v. 14-15), the thin one (v. 16) Then he goes on to speak of the woman he loves and describes her beauty (v. 17-25). The fame of her beauty, he says (v. 17-20), cries more aloud than the camels' mowl at the springs, more than the songs of the children,¹ more than the songs of the pilgrims going to Makkah. "The three 'By God!'" (v. 4) are the three forms of swearing: "*wa'llāhi, bi'llāhi, ta'llāhi.*" The meaning of the words "*sagal gu ēgaya*" (v. 17) is not clear.

ENRICO CERULLI.

¹ It is well known how the children of Somaliland gather to sing satiric song. See *Reinisch-Somali Wörterbuch*, Wien, 1902, *sub voce* "*hāyhāytan.*"

(*To be continued.*)

MEETING OF THE SOCIETY

A MEETING of the African Society was held on Tuesday afternoon, June 29th, 1920, at 3.30 p.m., at the Imperial Institute, South Kensington, for the purpose of hearing a lecture by Professor E. H. L. Schwarz, A.R.C.S., F.G.S., on the subject of "The Kalahari and its Possibilities."

Sir Harry H. Johnston, G.C.M.G., K.C.B., D.Sc., President of the Society, was in the Chair, and amongst those present were:—

Lady Gould Adams, Mr. Alfred Bigland, M.P., Prof. J. E. Duerden, Mrs. Duerden, Mr. W. A. Elliott, Mr. E. G. Gamble, Lady Lloyd-Greame, Mr. A. E. Kitson, Captain L. W. La Chard, Mr. P. A. Molteno, M.P., Colonel H. E. Rawson, C.B., R.E., Major H. Rayne, Mrs. Rayne, Mrs. Schwarz, Sir Alfred Sharpe, K.C.M.G., Dr. E. O. Teale, Miss B. E. Vertue, and Miss Alice Werner.

Sir Harry Johnston, in introducing the lecturer, said :

We have here to-day one who, I hope, is about to join us as a Member of the Society. I refer to Prof. Schwarz, who is a Professor of Geology, Rhodes University College, Grahamstown, South Africa, and the late Geologist to the Geological Commission, Cape Colony. Although English-born, he has spent some years of his life studying South Africa, and especially its geology. His papers in the *Royal Geographical Journal* may have attracted your attention. He wrote on the possibilities of the Kalahari Desert, and of such guesses as he could make of its past; and he also wrote on the subject of Ovambo and Damara peoples and their customs. He will now tell us more than we have hitherto gleaned from what he has written.

Professor Schwarz then delivered his lecture, which is printed on pages 1-12.

At the close of the lecture the Chairman called upon:—

Mr. Alfred Bigland, M.P. (Birkenhead), who said: Sir Harry, ladies and gentlemen, I came here with great interest because my friend Mr. Wilson Fox had told me of the lecturer and left me his book, which I read and was greatly interested in. I should like to say further why I am so interested in this lecture is that a number of us in Parliament about three months ago met together and decided to have an Empire Development Com-

mittee to look into all parts of the Empire where development work could be done by means of irrigation or railway work or anything that would bring more food and raw material into the world. Our idea is that owing to the war we have gone back in trade two hundred years in many parts of the world. We have to go back, and have got back, to the old way of barter. We cannot arrange our exchanges by bankers in many parts of the world, but must resort to the old practice of giving something in exchange for something. That being so, the British Empire must be interested in producing wealth from the soil; and in doing that we are providing markets for the finished manufactured goods of our own home country. Our manufacturers often find markets closed against them because they cannot get a bill of exchange. To-day in Parliament we are discussing a Bill wherein the Government are giving twenty-six million pounds sterling to assist manufacturers to send their goods abroad where no banking facilities exist. I am one of those who think that the British Empire possesses everything it needs in the way of food, clothing, and the needs of high civilisation, and therefore I am intensely interested in the resources of the Empire, many parts of which have only been lightly touched. I think this lecture, therefore, very interesting on a matter requiring attention, for if Professor Schwarz is right, we are going to re-create half a continent and make all kinds of things grow there and open up homes for our children's children, not in swamps but in these high plateaux of Central and South Africa. I think that this meeting should take a practical form, and I have therefore sketched out a resolution which I think may bring any little discussion we have into a practical form. I therefore propose

"That the Chairman, Sir Harry H. Johnston, be requested to forward to the Secretary of State for the Colonies the wish of this meeting that expert evidence be obtained jointly with the Union of South Africa as to the feasibility of Professor E. H. L. Schwarz's plan of reclaiming the Kalahari, and that the same be submitted to Parliament."

When I ask for expert evidence I mean that jointly our Colonial Office and the Government of South Africa should take this matter up, and, having exhaustively gone into it, that they will send their report to Parliament as to whether any plan is feasible. I am not a believer in the Government doing anything for nothing. Our Empire policy was that we should do everything for the native and the trader and that the Treasury should never expect to receive anything back at all, but in this matter we might follow the Government of India's precedent. When they reclaimed the desert and made it into gardens they leased it out at a low rate of money to farmers; but that sometimes brings in from thirty to forty per cent. interest. While you and I will not enjoy a deduction of income tax from it, our children's children will if rightly handled, and I agree with the lecturer that all this land brought into cultivation should return a revenue to the State. I believe that a large part of our revenue in the future may be derived from the undeveloped assets of the Empire. We have un-

cultivated but fertile lands in the Empire, and if the State, by a cash outlay, makes them of value, the unearned increment surely can come back to us, to pay in part for this great war and the social advancement of our people.

Colonel H. E. Rawson, C.B., who seconded the resolution, said: I have read what Professor Schwarz has written. The matter has been much discussed in certain newspapers as well as in certain journals, meteorological and agricultural, and the whole question is one which requires expert evidence. I think expert evidence should be obtained as to whether this is a practical scheme, and whether it is one that should attract attention and capital. I was interested in listening to Professor Schwarz regarding the rainfall of South Africa and the chances and possibilities of the country drying up. He gave us details about drought. There have been one or two excellent researches into the rainfall of South Africa. It is a complicated question, the evidence going to show that droughts may be expected and can be provided against. The main meteorological features of South Africa are easy to understand. The high pressure belt which brings these droughts is swept over the country to and from the Equator, and is bringing a succession of droughts where the belt pauses in its swing; and the more meteorologists go into the question the more they think that in years to come drought will be forecasted fairly accurately in South Africa. We need not be afraid that the country is drying up. They probably follow some law of periodicity, and they are succeeded by good or lean years. There will be a succession of good rains after drought, so we need not be unhappy at the fact that there have been a certain number of droughts. The question of the letting in of the water into this enormous district appears to have engaged the head of the Meteorological Department in Pretoria. He is keeping an open mind on the question. He has not, I believe, said it is impossible, but he seems inclined to shirk the question. It wants more and a wider amount of evidence before he can tackle such an enormous question as this. The inrush of moisture from the Atlantic into the centre of Africa or its artificial production and deposition is entirely a question of expert evidence, and the expert evidence is going to be given us by the aeroplane; by the man who can tell us what is going on up above. At present we have only the experience of the mountains for this purpose. There may be many other reasons for moisture condensing than those we have at present. I think, therefore, expert evidence is required, and I heartily support the proposition that we should agree to this resolution.

The Chairman then put the resolution to the meeting, and it was carried unanimously. He said: The African Society will endeavour to give effect to that resolution. In proposing our sincere thanks to Professor Schwarz for his lecture, I wish to say not only how interested I have been in it, but how I share with him apprehension regarding desiccation. I was struck with his description, for I travelled through that country with Mr. Erikssen, the man who discovered Erikssen's Drift, as far back as 1882, and I can see already there has been great deterioration even

in the northern part effected by the turning of the Kunene River to the sea instead of southwards into Trans-Zambezi Africa. He is right in pointing out that dryness is caused by the absence of these waters pouring nowadays into the sea, and that it will affect all the surrounding regions. There is increasing drought in Bechuanaland, and we have only to look at the official maps of South Africa to realise how much from the centre down to the south coast of the Union territories is being apparently abandoned by the population. I shall, therefore, have much pleasure in giving effect to your wishes, and we are indebted to the Professor for calling attention to the second greatest problem of South Africa, the first being the spread of the Sahara. I have not only been in South Africa in far back days, but also in North Africa; and while I appreciate the effects of desiccation in Algeria and Tunis, I have seen the achievements of the French in trying to stop the ruinous process. The Tunis of 1879-80 was very different to the Tunis of to-day, and the population has once more set in towards the Sahara. I have also been to the Moroccan Sahara to see what the French were doing there. A great French explorer, addressing the Geographical Society, told us how some of the dried-up rivers in the very heart of the Sahara were choked with the bones of hippopotami and crocodiles. There is enough native tradition to make us believe that this rapid drying-up took place in a short space of time, and the drawings on rocks show evidence of a Neolithic population which had enough water for herds and flocks in regions now uninhabitable. I hope you will join in thanking Prof. Schwarz for his lecture. (Applause.)

Prof. Schwarz: I thank you for the way you have received me. I think I have talked enough to you this afternoon, so I will not say more.

EDITORIAL NOTES

THE position of South Africa : within the Empire ; in relation to foreign countries ; and as a partner in the League of Nations, was discussed in a notable speech made by Lieutenant-General Smuts when the Vote on the Estimates was taken in the House of Assembly on June 21st and 23rd. Replying to critics of the League of Nations, General Smuts admitted that in its early days it had not fulfilled the great hopes entertained of it, but urged consideration of the many difficulties with which it was confronted. America had defected, partly on account of the Monroe Doctrine and partly through dissatisfaction at the number of votes given to the British Dominions. A feeling had arisen also that the Supreme Council was usurping the functions of the League. Of the five Great Powers America and Japan were standing apart, leaving the work to Great Britain, France and Italy. Italy was struggling with internal difficulties, so that Great Britain and France were left to be responsible for the state of affairs that had arisen. Thirdly, Poland, a nation which was the creation of the League, had, by embarking on war, done more than anything else to make people realise the League's apparent impotency. Nevertheless he thought that the ideal of the League was strong enough to carry it through in the history of the world. It had made a very small and insignificant beginning, but he believed that it embodied a great hope for mankind, and that the hope was strong enough and the circumstances of the world to-day were black enough to lead to its realisation, to its growing force, and to its becoming a real factor in the affairs of the world.

With regard to the position of the British Dominions in the world a new situation, said General Smuts, had arisen. There was no longer as heretofore one great power speaking for the whole, but six independent, equal, free members of the Empire. The change had come about recently, and found its first formal expression when these, by participating in the deliberations at Paris and by signing the Peace Treaty, established that in foreign relations they were henceforth to speak

for themselves and no longer to be bound by the voice and signature of the British Government. Certain anomalies remained. South Africa's formal correspondence was still conducted through the Colonial Office. The Governor-General was still the representative of the Colonial Office and the British Government, instead of—as he should be—the representative of the King and nothing else. A more serious matter was the position of South Africa in regard to her foreign affairs. In practice South Africa was still represented by diplomats of the Foreign Office. The whole position needed reconsideration following the precedent established when Canada sent a Minister Plenipotentiary to Washington to conduct negotiations between her and the Government of the United States of America.

General Smuts looked to the Constitutional Conference which he hoped would be called next year to clear up the existing anomalies and to establish the constitutional position of the Dominions. A new world had arisen, and a new empire had to be moulded in consequence, an empire that could only exist on a basis of complete freedom and equality. It had been inferred from Lord Milner's speech that unanimity could only be achieved by giving the majority power to pass resolutions on behalf of the Empire binding on the minority; but General Smuts declared that no new resolutions ought to be taken without the unanimous consent of all members of the Empire. He would never agree to the voice of South Africa being smothered or the opinion of South Africa being coerced by the majority voice of the Empire, and he was sure that the other Dominions would take up the same position.

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ON May 26th the House of Assembly discussed the Native **South African Native Affairs Bill**, the object of which is to establish a Native Commission and Local Councils and make provisions for native conferences with a view to facilitating the administration of native affairs. The Prime Minister, General Smuts, referred to the native deputation that, while he was in Paris, had laid its grievances before the British Government, and said he had been impressed by the spirit of distrust

of the white people in South Africa that their petition had manifested. It was undeniable that the former respect shown by the native for the white man was disappearing. The condition of affairs, accelerated by the physiological effects of the war, was due to the break up of tribal life, the growth of industrial conditions which lead to an undesirable mixture of black and white in the towns, and to the lack of any constitutional machinery whereby the natives can bring their views to the notice of Government and people. He was convinced that there was no desire on the part of the whites of South Africa to exploit the black man, but it was necessary to convince the natives of this.

In moving an amendment, Dr. D. F. Malan said that three courses were possible: oppression, fusion and segregation. Fusion had been tried in America with disastrous effects. Therefore, segregation, which would enable black man and white alike to live their own lives, was to be advocated. Most members who took part in the debate agreed to the necessity of consulting the natives on the legislation enacted in their own interests, and fear was expressed in some quarters that the black man should be led to believe that he was socially equal to the white. If the segregation policy were carried to its logical conclusion the natives would have to be allowed sufficient land to enable them to develop on their own lines, and the whites must be reconciled to doing their own work without native assistance, a possibility that was welcomed in some quarters of the Assembly. Dislike of native competition in trades which should be the monopoly of the whites was expressed, and it was feared that a situation might arise in which whites might be found working for natives.

Dr. Malan's amendment was negatived, and the Bill was referred to the Select Committee on Native Affairs.

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ALL the world to-day is short of cash. In highly organised countries the difficulty is overcome by the use of paper currency—the circulation of pieces of paper that are intrinsically worthless, but that people agree to pretend have a specific value. The pretence works satisfactorily where all agree to it, but it breaks down

where people demand for their produce or their labour currency of more real value. In many parts of Africa the substitution of paper money for coins has proved unsatisfactory, in spite of the fact that in West Africa "books," exchangeable for goods at recognised and reliable trading stations, have long had considerable vogue. The ignorant bush-native can hardly be persuaded to accept pieces of paper as if they had a real value, or to agree that a piece of paper of one particular colour may be twice as valuable as another piece of paper of a different colour but of almost the same size. In primitive communities it is necessary that currency should consist of articles that are useful or at least ornamental. In Africa slaves, cattle, puncheons of palm-oil, axe-heads, cloth, beads, kowries, brass-rods, bottles of gin, salt and sticks of plug-tobacco have all been used as currency. As modern trade methods gradually took the place of barter, money slowly got into circulation and was accepted, because coins, though incapable of being applied to any useful purpose apart from currency, have at least the merit of being more or less ornamental. Coins have besides two qualities which it is important that currency should have—they are easily portable and indestructible. In Africa it is especially necessary that currency should be indestructible, for the native has a tendency to hoard. This is proved by the fact that during the last few years ten million pounds' worth of coined silver has disappeared from circulation in British West Africa and a very considerable amount in Rhodesia. It would probably do no harm to the Treasury and to the African banks if the West African bush-native could be persuaded to hoard paper-money, but this, in a land of mildew and white-ants, he shows himself reluctant to do. Unless African trade is to languish until the bush-natives have been persuaded to use paper as currency, some alternative must be devised. It is a problem that can be handled satisfactorily only by financial experts, but whoever devises a form of currency for use among unsophisticated Africans must realise that so far as possible whatever is to take the place of coins must be either indestructible or capable of being stored for a long time. If it is not possible to find an easily portable currency of real

value, then something that at least suggests a value should be devised, such as the miniature imitation axe-heads that Mary Kingsley found in use as coins amongst the Fans.

In Germany it is proposed to use porcelain money, and it is possible that money of this kind might prove acceptable in West Africa, since it would have three necessary qualities. It would be practically indestructible, easily portable, and at least as ornamental as kowries.

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By the partition of what was formerly German East Africa the Tabora-Uganda section of what is to be the Cape-to-Cairo Railway falls within the area held by Great Britain on behalf of the League of Nations. The whole of the central railway from Dar-es-Salaam to Tanganyika also comes under British control, although this railway was designed by Germany to tap the Congo trade, and though it was Belgians who first occupied Tabora and, during the latter part of the war, administered the Tabora-Kigoma section of the line. The Belgians, however, are promised transport at ordinary rates and the privilege of sending goods over the rail in bond. The annexation of the Protectorate of British East Africa, for the future to be known as the Kenia Colony, is to be followed by the raising of a loan of five million pounds, half of which is to be devoted to the Uasin-Gishu and Thika extensions of the Uganda Railway.

The Trans-Zambesia Railway, which is to connect Nyassaland with the Portuguese port of Beira, work on which has already begun, is not regarded in Nyassaland with such unanimous satisfaction as might be expected. At a recent meeting of the Nyassaland Chamber of Commerce and Agriculture objection was raised that Nyassaland's guarantee of the interest on debenture issues amounted to a tax which Nyassaland must pay for the development of a country outside the jurisdiction of the Protectorate. Fear was also expressed that when the railway is completed the British concession at the port of Chinde—a concession of great value so long as the Zambesi and Shire rivers combine to form a waterway from the sea to Nyassaland—will lapse.

TROPICAL administration has always been regarded, in this country at any rate, as a science that comes naturally to whomever is appointed to take part in the government of a dependency. No attempt is made to teach a newly appointed official his duties before he embarks on them, and he is left to learn them from experience and the advice of his colleagues. This system, or lack of system, is to a large extent justified by the general excellence of its results, but the results might be even better if an official appointed to administrative duties received, before he were sent out, a grounding in various branches of knowledge that would be useful to him in his work, such branches of knowledge, to mention but a few, as native languages and law, ethnology, hygiene, economic entomology and tropical agriculture. It has been left to the Belgians to take the lead in regarding administration as a science that should be taught. This month (October) will see the opening at Antwerp of a Colonial School at which students above the age of eighteen will be received after a medical and competitive examination. The course of study will last three years and a half, and, besides general subjects, will cover particular subjects ranging from native languages to the geology of the Congo territory. The object of the school is to enable students to understand native institutions and fit them to govern by impressing upon them the idea that "modern civilisation can only have honourable and lasting results if the colonised gets from colonisation as much advantage as the coloniser, and that, if there is any doubt, it should be in favour of the colonised."

The University of the Cape of Good Hope is also taking a step in the same direction by inaugurating a School of African Life and Languages.

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UNDER present conditions a man who has had two or three years' experience of a district in Africa is likely to find on his return to England that officials at the British Museum know more than he himself

does about the ethnology of the very people among whom he has worked, and that by attending a class at the School of Oriental Languages he may greatly enlarge his knowledge of the theory of Hausa, Swahili or other African languages of which he already has a practical knowledge. It should be possible for an African official while at home to increase his efficiency by studying, without extra cost to himself, subjects connected with his work, subjects that the pressure of his routine work has made it difficult for him to study in Africa. If we had in England such a thing as a School of Tropical Administration he would have this opportunity, and it would be no loss to the public service if he were encouraged to attend the school at first as a pupil and in later years as an instructor. ●

It has recently been found necessary to increase the tours of duty in West Africa. This is regrettable, for experience has taught that an official, to maintain his health, and consequently his efficiency, must receive generous treatment in the matter of leave. Probably the extension of the tour of duty is a temporary measure necessitated by the aftermath of war. Under ideal conditions the period of service in Africa would be shortened, not lengthened, and officials would be required, after their period of leave had expired, to attend a course of Tropical Administration either as pupils or tutors before returning to their routine duties in Africa, thus enabling them to learn comfortably, in a healthy climate, much that they must otherwise learn in their scanty spare time in an unhealthy climate. The idea of giving officials duties in England as well as in Africa might with advantage be carried still further under a scheme by which each official did a tour of duty in the Colonial Office before returning to his station. By so doing he would learn something about the difficulties of the permanent official at home and enable the latter to understand more clearly his own particular difficulties in Africa. During the war the shortage of man power made it necessary to staff the War Office with men who had become physically unfit for more active work, such men being sent back overseas when their health permitted it. It would surely add to the

efficiency of the service as a whole if the Colonial Office adopted a somewhat similar plan.

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THAT the barbaric and savage races of the world tend as a whole to die out as a result of contact with **Uganda's Dwindling Population** the white races has long been recognised, but the African races have been regarded as being exempt from this general rule. It is therefore alarming to read in the chapter on *Missions* in the second edition of the *Handbook of Uganda*:

"In spite of a steadily decreasing population the number of professed adherents of the different missions is increasing, and now exceeds the combined Pagans and Mohammedans."

By transposing the order of this sentence it would be possible to afford ready-made propaganda to the school of sociologists who declare that Christianity has a pernicious influence on primitive peoples. This would be unjust, for when the native does deteriorate physically or morally the fault should more justly be attributed to European rather than Christian influences. It is true that some of what may be called the by-products of Christianity have had a bad effect—such as the wearing of unsuitable clothes, and the too drastic prohibition in Kharma's country of the manufacture of native beer, which was practically the only food that could be assimilated by the aged and toothless. More harm has been done by the introduction of diseases such as measles—which is a mild disease in Europe, whose inhabitants have become by heredity partially immune from its influence—but is almost as deadly as smallpox in other parts of the world. The decline is attributed, among other things, to syphilis and sleeping-sickness. For syphilis, Europeans must share the blame with Indians and Arabs, but Christianity should exercise a deterrent effect on the scourge, and sleeping-sickness must to some extent be attributed to the increased facilities for travel which civilisation has brought, but again, it is civilisation's task to stamp it out.

Whether or no the decline in the population is attributable primarily to the causes assigned or should be sought further, it is obvious that the problem is an urgent one.

At the last annual meeting of the Anti-Slavery and Aborigines Protection Society a number of subjects of African interest were discussed. **Export Duty on Palm Kernels.** The Society resolved to press for the abolition of the export duty of £2 per ton on palm-kernels consigned from British West Africa to non-British ports. Mr. Charles Roberts, the President of the Society, urged that the duty was especially hard on the small exporter, as he was not allowed to give a bond, but had to pay money down and obtain a licence. Lord Emmott said that the duty had been imposed under pressure from the Colonial Office, and that all non-official members of the legislative assemblies, both European and native, voted against it. The Indian Government had objected to a similar duty on ground-nuts exported from India to foreign ports, on the ground that it was not in the best interests of India and difficult to justify. Lord Emmott contended that what was opposed to the interests of India was opposed to the interests of West Africa, and since it was not possible to impose a differential duty on palm-kernels exported from territories held under mandate from the League of Nations, the natives of our own colonies were subjected to a disability to which the natives of the mandated territories were not liable. He urged also the possibility of French retaliation, and maintained that the income derived from the differential export duty, which was stated to be necessary for native education, was so small as to be negligible.

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At the same meeting Professor Gilbert Murray moved a resolution urging on His Majesty's Government the importance of securing without delay the issue of the mandates for the Colonial territories placed in trust under the League of Nations. He said that there were four conditions that had to be observed by the Mandatory Powers: (1) Freedom of conscience and religion; (2) prohibition of such abuses as the slave trade, arms traffic and liquor traffic; (3) the prevention of the establishment of naval and military bases, and of military training of natives, except as police or for home defence; (4) equal commercial opportunities for all members of the League.

Mandates.

Professor Murray thought that it would be found impossible to prohibit the use of liquor amongst the natives and allow it amongst whites, and suggested forced labour and the alienation of native land as abuses which the League of Nations should prohibit. He considered it advisable to make it impossible to remove natives from mandated areas to areas where the League's restrictions are not in force. He regretted that it was possible for powers holding sovereign rights in Africa in areas not held in trust under the League of Nations to raise native troops for purposes other than home defence, and he urged that the principles governing areas held under the League of Nations should be applied also to non-mandated areas, as such a policy would give Great Britain the right to protest against any action contrary to the spirit of the League of Nation's regulations, which any other member of the League holding sovereign rights in Africa might take in territories not subject to the League.

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SIR SYDNEY OLIVIER then discussed native ownership of land in the Crown Colonies. He advocated a

Native Lands. definite Government policy establishing inalienably the rights of the natives to lands beneficially occupied by them. He stated that our land policy in various parts of Africa was creating unnecessary congestion of natives in reserves, and was causing a feeling of bitterness amongst them, and referred especially to the compulsory movement in Rhodesia of natives from their original homes to the reserves.

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THE Anti-Slavery and Aborigines Protection Society has approached the Colonial Office on the subject of compulsory labour in British East Africa, with especial reference to the proposal to authorise the Administration to demand compulsory labour on public works up to a maximum of sixty days per annum (in 1909 the maximum was one month), and to advise chiefs under penalty of administrative displeasure to induce men to work for private employers. The Society reluctantly admitted the necessity, in some cases, of compulsory labour on works of public utility,

but considered it wholly unjustifiable when applied to private interests. Comparison was made with the policy adopted in Nigeria, as to which Sir Frederick Lugard reported that his Government was opposed to compulsory labour even on roads and railways, and that private employers should attract labourers, not by offering high wages, which was opposed to the interests of the community, but by making conditions of service attractive. The Society advocated that the *corvée* in British East Africa should be applicable to white and Indian immigrants as well as to natives, that every person liable to the *corvée* should possess the right of commuting it by payment of a tax, and that no person should be compelled to labour in areas not within easy reach of his own home. A definition of terms of contract was called for and a system of licensing recruiting agents. The Society noted with satisfaction Lieutenant-Colonel Amery's declaration in his recent speech on the Colonial Office vote that the object of the Colonial Office was not so much to supply white employers with labour as to discourage idleness amongst the natives.

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TWENTY years have passed since Mary Kingsley gave up her life at Simon's Town to the service of Boer prisoners in hospital. To keep her memory green we have the books in which she applied first-hand experience, sympathy, understanding and humour to the problems which it is the African Society's task to elucidate. We have, too, in the African Society itself a monument to her memory such as she herself would have chosen. With regard to her influence on African developments, Mr. R. E. Dennett, to whose "Notes on the Folk Lore of the Fjort" (1898) Mary Kingsley contributed an introduction, has appealed in a letter to the Press asking those who can contribute any "effects of her message" to communicate with him at Temple Bar House, 28, Fleet Street, E.C.4.

**In Memory of
Mary Kingsley.**

BOOKS REVIEWED

Initia Amharica. Part III., Vol. 1. *Amharic-English Vocabulary.* By C. H. Armbruster, M.A. (Cambridge: University Press. 1920. 84s.)

OF the Semitic languages, Amharic is spoken by a greater number of people than any other with the exception of Arabic. Abyssinia, of which country it is the official language, marches with British territory for a distance of over 1,700 miles. In view of these circumstances it has been specially regrettable that, until recently, English-speaking students of Amharic have been obliged to rely almost entirely on foreign dictionaries, first among which has been Professor Guidi's *Vocabolario*. Mr. Armbruster's work, the first part of which is under review, is therefore extremely welcome, all the more so because its publication takes place at a moment when British commercial enterprise is beginning to assume important dimensions in Abyssinia.

Viewed as a contribution to the world's linguistic knowledge, Mr. Armbruster's *Vocabulary* is sufficiently distinguished; as an achievement of personal industry it is even more remarkable. Its author is not likely to gain any material profit from its publication. He does not follow the career of letters, but is, on the other hand, an exceedingly busy official. It was in the course of his official duties that he first came into contact with Abyssinia, and concurrently with the production of his series, "*Initia Amharica*," he was engaged in exacting Government work. The results he has achieved in his spare time bear witness, not only to a remarkable industry, but also to a degree of scholarship rarely found in official circles, even in those of the Egyptian and Sudan Civil Services. His *Vocabulary* can more than hold its own in comparison with those of Guidi, d'Abbadie and Isenberg.

To attempt criticism of its accuracy would be an impertinence on the part of any British reviewer, for its author stands alone among living Englishmen in his knowledge of the language. To a humble student it may, however, be permissible to comment on the system of arrangement. Mr. Armbruster allots a separate line to each of the numerous derivatives. This treatment, especially in the case of the less

common derivatives, may seem to the beginner to add unnecessarily to the bulk of the volume, but it is designed to assist the beginner himself, who will probably lack the grammatical knowledge required to enable him to deduce the derivatives for himself. It is also more convenient than that of Guidi, who, while giving the derivatives, includes them in one comprehensive paragraph which has to be read carefully to avoid missing the desired word. In appending the derivatives to the root word, Mr. Armbruster follows a scientific method, but one which may at first be a stumbling-block to the beginner. To take a concrete example, the word "Māscāl," meaning a cross, or the feast of the Invention of the Cross (an important Abyssinian festival), takes its place under the verb "Sāqqāla" (to hang), from which it is derived. It is more than possible that a beginner would encounter the derivative in conversation or reading before he made the acquaintance of the verb from which it is derived, and in the absence of grammatical knowledge would search in vain for its interpretation under the letter "M."

To the beginner, therefore, for whom the series is intended, it would seem to be more convenient to place the derivatives under their own initial letter, with a note as to their derivation. Mr. Armbruster's treatment is, however, more scientific in principle.

The volume under review only deals with the letters H to S, or less than one-third of the whole alphabet. With the publication of the remaining volume or volumes, the English-speaking student will have at his disposal what will undoubtedly remain for many years the standard Dictionary of the Amharic language. It is to be hoped that the number of Amharic students may rapidly assume dimensions which will warrant the publication of another edition of this valuable work in which the addenda, which in the present volume occupy 144 pages, may find their proper places in the text, and which, by the use of thinner paper and the possible exclusion of some of the comparative references and less common derivatives, may be brought more within the scope of a traveller's library.

To-day but few of the British Consular officials and traders in Abyssinia have more than the sketchiest knowledge of the language, or can dispense with, or check the transaction of their business by, an often unreliable interpreter. The "Initia Amharica" series to a large extent removes all excuse for this regrettable state of affairs, and it is for that reason a work of no little national value. Apart from this consideration, Mr. Armbruster is to be congratulated on an achieve-

ment which has won for him a distinguished place among the world's lexicographers.

L. A.

The Kalahari, or Thirstland Redemption. By E. H. L. Schwarz, Professor of Geology, Rhodes University College, etc., etc. (Published by T. Maskew Miller, Cape Town, and B. H. Blackwell, Oxford.)

The Kalahari Problem. By August Karlson (late of the Union Department of Irrigation). Reprinted from the South African Mining and Engineering Journal. (Argus Company, Johannesburg. 2s.)

ONE of the great problems of the immediate future is to arrest the steady drying up of the African Continent. The Sahara Desert has been spreading since the days when the Congo and the Niger flowed into the Mediterranean and the North African seaboard was Europe's granary. The waters of the Niger are gradually being stolen by the rivers of Sierra Leone and Liberia. The Benue is robbing the rivers that feed Lake Tchad. The Kalahari Desert is spreading eastwards and northwards, steadily reducing the arable areas of South Africa and threatening the water supply on which the fertility of Central Africa depends. In fact the day seems to be within measurable distance, reckoning by geological periods, when even the vast forests of the Congo will give place to lifeless sand dunes.

At the moment the growth of the Kalahari Desert affords the most urgent problem. Within the era of which we have definite knowledge the year 1820 is the most important, for in that year the process of desiccation began to gather speed. In South Africa during the last twenty-two years droughts caused by this desiccation have doubled in frequency, as appears from the following table compiled by Professor Schwarz :

1874-1896.—7 good years. 8 normal years. 8 droughts.

1894-1919.—2 " " 4 " " 17 "

The last drought (1919), according to Professor Schwarz, cost South Africa £11,000,000. To the increase of drought Professor Schwarz attributes the existence of the " Poor White " problem. This is disputable, for it is inevitable that where two races having different standards of living compete in the same labour market the less efficient members of the race that has the higher standard will tend to fall to the level of those having the lower standard; but it is significant that in

1916-1917 eight per cent. of the total white population of the Union were "poor whites," and of these nearly two-thirds were living in "absolute poverty." It is obvious, at any rate, that unless South Africa finds a way to conquer the Kalahari, the Kalahari will assuredly conquer South Africa.

The authors of the two books under review are agreed as to the urgency of the problem. They differ as to its most practical solution. Professor Schwarz considers that a policy of irrigation on a large scale is doomed to ultimate failure, for the cultivation of irrigated land needs extreme care and has often unexpected and disappointing results. In dry seasons irrigation tends to cause "brak," and "everywhere one hears the cry for Government to urge their experts to devise some method of dealing with it." His alternative scheme is to restore to the climate of South Africa the moisture that it possessed before the fatal year 1820. To do this he would flood the low-lying land at the Etosha Pan, Ngami and Makarikari, re-creating the lakes that once existed there, and thus giving to South Africa a moisture yielding area of 50,000 square miles, which is almost exactly the area of the three Central African lakes, Victoria Nyanza, Tanganyika and Nyassa. To flood this area he would build weirs across the Cunene river and across the Chobe above its junction with the Zambesi. He estimates that the work would cost less than five million pounds.

Mr. Karlson questions the accuracy of Professor Schwarz's estimates of the area capable of being flooded and the benefits that would ensue from flooding it. His own scheme is to redeem the land by afforestation on a large scale, by fertilisation and by irrigation, carrying water from the highlands of Angola and Northern Rhodesia by means of a great canal system, the initial cost of which he places at £15,000,000. To present the arguments of these two experts in such a manner as to enable the reader to judge between them would need far more space than the JOURNAL could afford—and far more technical knowledge than the reviewer has at his command. The problem they discuss is so important and the need for its solution is so urgent that each is entitled to have his views studied at first-hand.

As a "logical addition to his Kalahari scheme," Mr. Karlson advocates the construction of a Cape—Gibraltar—London electrical broad-gauge railway, which will involve the tunnelling of the Atlas Mountains and the Straits of Gibraltar and the bridging (this he considers to be the greatest engineering difficulty) of the Congo River. The railway is to derive its power from the Orange River Falls, the Victoria Falls, the

cataracts of the Kassai and Lobai rivers and the streams of the Atlas Mountain.

He claims that his scheme has advantages over the Cape—Cairo route, of being more direct, of having only fifteen hundred miles of unhealthy country to traverse instead of three thousand, and of crossing the Sahara at a high, cool altitude.

The Bantu, Past and Present: An Ethnological and Historical Study of the Native Races of South Africa. By S. M. Molema. (Published by W. Green & Son, Ltd., Edinburgh.)

THE author of this book is a member of the royal house of the Barolong section of the Bechuana race. His grandfather, who established his branch of the tribe at Mafeking in the early part of the nineteenth century, embraced Christianity about 1840, and on the departure of the missionary who converted him took over the spiritual care of his people. The author, therefore, should be well qualified to act as spokesman to those of his people who, having received a white man's education, find themselves denied the white man's status.

One opens the book with disappointment. It is a pity that a man peculiarly well suited to write a much-needed book should devote Part I. of his book to matters within the competence of any hack-writer. When, however, he has said what he has to say about *homo primigenius* and the *Melpomene* of Herodotus, he becomes more interesting, for in his account of the races of South Africa he brings up to date and in some cases amplifies the information to be derived from Stow. His chapters on the *Bantu Languages, Religious Beliefs, Slavery, Missionaries, and Missions* contain little information that is not easily available from other sources. Other chapters on Native-Education, the relations between the Natives and the South African Government, the part played by the natives in the South African and European wars, contain information that is also to be found elsewhere but less readily. In chapters that deal with racial problems, colour-prejudice, the advantage or otherwise to the native of education and Christianity, the author attaches less value to his own opinion than to that of others. His bibliography of books relating directly or indirectly to Africa contains the names of 115 books, including works by Buckle, Sir J. G. Frazer, Haeckel, Kant, Maine, Mill and Nietzsche—and he quotes from nearly all of them, sometimes at considerable length. In one place five consecutive pages contain nothing but quotation from Gibbon's *Rome* and Green's *England*.

All sense of disappointment, however, disappears when we

come to the chapters in which the author expresses his own opinions as to the disabilities under which he and his fellows labour. He considers that the position of the races of South Africa has deteriorated since the Union: "Their condition has grown worse and worse every year; their rights, never many, nor mighty, have been curtailed systematically since then to now; and the future is dark and dreary." He develops this theme with a clear presentation of undeniable facts and with admirable restraint. Others of his countrymen who have expressed the same opinion in print have been inclined to weaken their case with overmuch rhetoric, but the author puts his case clearly, concisely, and pointedly. A certain amount of bias in favour of men of his own colour would be pardonable, but of bias Mr. Molema shows very little. His statement that among the Bushmen great fidelity subsisted between man and wife does not harmonise with Stow's account of the phallic orgies that accompanied the '*Ko-'ku-curra* dance, and it is misleading to say that prostitution was entirely unknown to the primitive Bantu without mentioning various unnatural vices, such as that called *Hlobonga*, to which the Amazulu and others were addicted.

If he does his people rather more than justice in the matter of morality, in its restricted sense, Mr. Molema might well have enlarged without exaggeration on a virtue which the Bantu have in a marked degree—loyalty. Most travellers in the remoter parts of Africa have come into close contact with men in whose hands they would confidently have entrusted their lives, if not their sugar bowls. Wars waged by the natives against the whites have been but an expression of tribal loyalty, and Mr. Molema's chapters on the South African war and the European war contain abundant evidence that in these crises the natives not only displayed staunch loyalty to the King, but fretted against restrictions placed on practical expression of their loyalty.

The loyalty of the South African Bantu is an Imperial asset of incalculable value. Its loss would be irreparable. Should it ever be lost the fault will be due in part to selfish exploitation of the coloured races, in part to race-prejudice and misunderstanding.

In so far as his book serves as an antidote to race-prejudice and a means of correcting misunderstanding Mr. Molema has done a service, not only to men of his own colour, but to all concerned in the welfare of South Africa.

Physical Characteristics of the Mende Nation.

THE 49th volume of the *Journal of the Royal Anthropological Institute* contains an article by F. W. H. Migeod, author of *The Languages of West Africa*, entitled "Some Observations on the Physical Characteristics of the Mende Nation." The author considers that the Mendes have been established in their present habitat in the eastern part of the Sierra Leone Protectorate since as early as the second century A.D. He believes that the race is composed of two elements that have only recently mingled and of which the fusion is not yet complete: the one derived from the tall Mandingo people; the other from the small-statured, almost dwarfish race from the forest regions immediately behind the Sierra Leone coast line. He bases these beliefs partly on the study of the Mende language, the majority of the words in which are of more or less corrupt Mandingo origin, though its phonology and grammar differ considerably from Mandingo, and partly on the physical characteristics of the race, which contain several sharply defined groups, the minority, the Mandingo element, being tall, and the majority short. The short-statured individuals, that show the admixture of the forest tribes, are not dwarfish or in any way abnormal, and have no connection with the light-skinned pigmies of the Congo region. That the admixture of the two races from which the Mende nation derives its origin is of comparatively recent date Mr. Migeod considers proved by the fact that the groups are sharply defined, by the fact that members of the tall groups do not readily mix socially with those of the short groups if companions of more approximate height are available, and by the fact that he found it generally possible on hearing the name adopted by an individual to make a shrewd guess as to whether he belonged to a tall or short group. When a Mende man leaves his home in search of employment he usually adopts a new name, usually an ordinary Christian name, less frequently a Mohammedan name, or the name of some place he has visited. Just as the English names Marmaduke or Bert give some indication of the social position of their owners, so the name adopted by a Mende man gives some indication of his height!

Anthropos.

THIS admirable polyglot publication maintains its high standard of excellence in spite of the aftermath of war. The latest issue is well illustrated, and is inferior to pre-war issues only in the quality of its paper. Dr. Albert Drexel contributes a paper on the grammar of the Bantu, and Father

Müller, of the Order of Trappists, comments on an article on Kaffir handicrafts by P. Meyer (published in a former issue of *Anthropos*), and illustrates it by photographs of Kaffir handiwork. Among articles of more general interest are one on "The Origin of Words," by Univ. Prof. Dr. Wilhelm Oehl, "The Study of Primitive Religion," by Prof. Carl Clemen, and "The Problem of Totemism," by various authors.

Handbook of Uganda, by H. R. Wallis, C.M.G., C.B.E.

Published by the Crown Agents for the Colonies, 4, Millbank, S.W.1, on behalf of the Government of Uganda Protectorate. 2nd Edition. 7s. 6d.

THIS is a concise summary of everything that anyone interested in Uganda should know, from the game laws to the treatment of prickly heat and from the crops best suited to the climate to the transport facilities afforded by lake-steamer, railway, or the primitive Safari style. The second edition contains chapters on "Botany, Geology, Missions," and "The Great War in Uganda." The previous chapter on "Anthropology" has been recast and extended to include notes on the northern races of the Protectorate. Indirect evidence of the progress of the Protectorate is afforded by the fact that in recasting this chapter use has been made of a book written in Luganda about the Baganda by a Muganda, Sir Apolo Kagwa, K.C.M.G., as well as of works by Sir Harry Johnston and the Rev. J. Roscoe. Illustrations of the Botanic Gardens and the lake-steamers help the reader to visualise the progress made. The chapter on "Missions" makes a disquieting statement as to the steady decrease of the population to which reference is made in the Editorial Notes.

Report of the Chief Native Commissioner (Southern Rhodesia) for 1919.

THE chief note of this report is the alteration for good or evil that changing conditions are making in the lives of the natives; change due in part to the aftermath of war and, in part, to the increasing demand for land. Finding that prices rose without a counter-balancing increase of wages, the natives picketed the stores of profiteers, and on being warned that this was illegal organised a boycott by propaganda; their economic war against profiteers being notably marked by restraint and general good behaviour. The native herds of cattle show considerable improvement, and the natives appreciate the assistance afforded by the institution of co-operative dipping tanks for the use of which a small charge is made; profits being applied to the purchase of bulls for co-opera-

tive use. It is regrettable that "native chiefs becoming wealthy find it necessary to move on to reserves to obtain for their herds the pasturage denied them by the private land-owner. In this manner they are becoming temporarily or permanently divorced from their people who remain on the sites of their old home." The whole question of the acquisition of land by natives is brought into prominence by the fact that one chief bought a farm. "That it is desirable that they should be encouraged to do this is undoubted," says the report, "but the question of where and under what conditions this should be done calls for early consideration and decision."

Report on the Geology and Geography of the Northern Part of the East Africa Protectorate: With a Note on the Gneisses and Schists of the District. By John Parkinson, M.A., M.Inst.M. & M. (Published by H.M. Stationery Office.)

DURING the first year of the war Mr. Parkinson travelled through the provinces of the Northern Frontier District and Jubaland for the purpose of examining the geological conditions obtaining with a view to augmenting the existing water supply.

The expedition travelled from Nairobi to Fort Hall, skirted the northern flanks of Mount Kenya, to Meru and Archer's Post on the northern Uaso Nyiro. The river was then followed eastwards as far as the Lorian Swamp, thence north-eastward through Wajhir to Moyale on the Abyssinian frontier and on to Eil Wak on the borders of Jubaland.

In Jubaland the chief problem from the administrative and economic standpoint is the water supply. Normally dry channels traversing the country hold out hopes of successful exploitation, though the opinions of travellers differ as to the amount of surface water any one may periodically contain, the frequency of surface flows and the passage of underground water. As in other semi-desert regions the level of these channels is very little lower than that of the surrounding country, surface flows are infrequent and last but a short while, and the channels are distinguishable chiefly by the different character of the vegetation which overgrows the channels. In the neighbourhood of Moyale water was found in wells, most of which were little better than shallow pits, the water in which varied from "not very unpalatable" to "exceedingly unpleasant."

From the evidence available it appears that in the geological history of the country examined early and prolonged ero-

sion preceded the eruption of plateau lavas. A fluvial, lacustrine phase followed, both inside and outside the Rift Valley, during which the Jubaland plain was covered by a shallow sea. This was followed by a later phase of elevation and slow desiccation, distinguished by the formation of smaller volcanoes and puyes.

Bulletin of the Imperial Institute. Vol. XVIII. No. 1.

AMONG the results of the War must be counted increased activity in the search for sources of raw materials. Although iron ore is found in several parts of the Transvaal, Natal and the Cape Province, practically no use was made of it till last year, when pig iron was first produced on a small scale in blast furnaces erected at Vereeniging and near Pretoria. Iron has been manufactured at Vereeniging since 1913, but only from scrap iron obtained from the railways and mines. A review of the possibilities of South African iron production appears in this volume of the Bulletin of the Imperial Institute, in which it is stated that there seems to be a good prospect of the establishment in South Africa of a large and profitable iron industry.

The same issue of the Bulletin contains a report on samples of cinchona bark submitted to the Imperial Institute from the ex-German colonies of East Africa and Cameroons. The results of investigation confirmed the view that cinchona bark of good quality could be grown in the former territory, and that the plantation of quinine producing trees, especially *C. Ledgeriana*, was desirable. The bark from the Cameroons was shown to be of good quality, richer in quinine-sulphate than the bark from Java, but it was reported that at present the number of trees planted is insufficient to supply the bark in commercial quantities.

The Bulletin contains also a long and detailed article on the cultivation and preparation of cocoa, and notes on the Cotton Research Board of Egypt and Wheat-growing in South Africa.

CORRESPONDENCE

To the Editor of the JOURNAL OF THE AFRICAN SOCIETY.

DEAR SIR,

Madagascar lies so near to Africa and yet is so obviously distinct that any information correlating the two is especially valuable; and I am probably not alone in welcoming an article in the last JOURNAL on The Bantu and Madagascar. I have read the paper with intense interest, as well as with a sense of great gratitude to our President for rounding off in his notes those points which too sharply mark the distinction between the Bantu and Malay line of study.

One point, however, seems to have escaped notice, and that is how closely the racial conditions prevailing to-day in Madagascar fit in with the ancient traffic in gold from Sofala; on the West or African side are those people which interest the African student, whilst the rest of the island is taken up with Malays, who may well have been erstwhile participants in the trade with India which linked in with the Sofala gold trade.

If one draws a line from the mouth of the Persian Gulf towards Sofala, it will be seen that to pass by the Comoro Islands would be the most direct route; there would be no reason to call at any of the towns we now know on the mainland. Moreover, the language of the Comoro Islands, described by our President as *archaic* Swahili, corroborates this. The late Major Stigand in his *Land of the Zinj* saw no difficulty in regarding the present Arab trade with the East Coast as the direct descendant of the old Phœnician trade of the earliest era. Or, to state the case in another form, the coast language is not of necessity due to Arab influence, but may have arisen in far earlier times; and incidentally is it not possible that the Arabic of to-day is a development of the speech of these Phœnicians—or of a kindred dialect like Hebrew—closely interpenetrated with certain forms of Sumerian speech, and originating, say, 3000 B.C.?

On the intimate connection of this type of language with Bantu I have already given some notes; those notes have since been greatly enlarged, and extended somewhat into other forms of African speech. There is no linguistic difficulty in deriving Swahili from the intercourse of Phœnician traders with early representatives of the Bantu race.

The Malay element in Madagascar may easily have come with that Indian trade which met the gold trade somewhere along its route from the Persian Gulf to Sofala. Masudi, for instance, speaks of ivory tusks from the country of the Zinj being sent to India; and Solomon's gold was accompanied by products whose names indicate an Indian origin. They were bartered somewhere on the gold route, possibly even in the Comoro Islands themselves. Just as the Eastern trade found its way later to Zanzibar and the mainland, so we may

well suppose that some of this trade spread in the opposite direction to Madagascar; or, if not the trade itself, at least considerable elements of the slaves and mixed populations involved in it. It is even asserted that Chinese at one time visited East Africa, a fact which might equally explain how Malays were brought to Madagascar. In any case, the peopling of Madagascar as described by Mr. Birkeli is in remarkable accord with the casual glimpses that are afforded us of the age-long trade with East Africa, once we admit that it focussed itself on some neighbouring spot, such as the Comoro Islands.

For that trade must have employed many people. From earliest times the Sofala goldfield was world-famed. In the world's infancy it is mentioned as a characteristic feature of the map, and specifically described as surrounded by water. This is not the place to discuss Havilah, Pishon, and such kindred questions textually; but on the general issue one may say that no place has yet been found except the Rhodesian gold area which could fulfil these two conditions, viz., notoriety for the richness of its gold, and an approach by water, which, regarded as an ocean, laps both sides of the South African peninsula.

After mounting the Sabi range, a vast sandy plain (so Hall, *Zimbabwe Ruins*) stretches before the traveller. In that vast space lies the richest gold field of the world. The earliest gold-seekers found no name for that region, and no people there. For had there been a people, would they not have furnished a name? And so they called the place Havilah, sandy; or, as we should put it, The sandy plain, or even Sandy, with a capital "s."

For some reason not yet clear, these men, not content with getting gold, built vast solid structures of stone for which the labour of hundreds of men would be required, in addition to the actual digging, smelting, and working of the gold into ornaments. Where did that labour come from, if it was not imported? Such imported labour would explain several African problems; and traces of its existence seem clearly discernible in the races of Madagascar, described by Mr. Birkeli. It is even possible that the Bushmen were originally imported labour.

And what more natural than to account thus for such races as the Zulu, which linguistically, if not ethnologically, are so markedly different from the homogeneous and compact group of pure Bantu. Not improbably, too, this influence extended as far West as the people we now call the Fang. Various language questions seem to demand some such supposition. This section of imported labour was, I believe, mainly from the land of Cush, bordering on the Persian Gulf, of the same stock and of the same language as the African Bantu. The land of Cush, be it noted, is first mentioned in the very next sentence to that which speaks of the land of Havilah, where there is gold; and is further noticed centuries later by Homer and Herodotus.

That they might develop strong military instincts is not impossible; perhaps they were even so employed by the gold-workers at Zimbabwe. Certain it is that in 870 A.D. the Zinj formed a considerable part of the Khalifan army of Bagdad—whether Zinj from Africa of Zinj from the Persian Gulf, as would seem more probable, is not recorded.

In conclusion, I wish to point out the strong probability that "zimba" in Ba-zimba is an African pronunciation of Zinj. Zinj is, I believe, a transliteration of *zig*. Now $\sqrt{\text{zig}}$ is a very early and very clearly developed root, meaning "dark," "black," and develops as $\sqrt{\text{zim}}$ and $\sqrt{\text{zib}}$ in many kindred concepts. To take only a few:—from $\sqrt{\text{zig}}$ originate Heb. *ho-seq*, darkness=G. *eki-ek-iza*: Sw. *giza* (by metathesis); cf. Sum. *gig*, be dark; to $\sqrt{\text{zib}}$ may be referred G. *ziba*, be dim, whence *omuzibe*, a blind man, and the phrase, *obude busibye*, the day is drawing to a close. The same phrase is found in Luba and Nyoro, the respective verbs being Lb. *ila*; Ny. *ira*, by metathesis for *liwa* from $\sqrt{\text{lib}}$ for $\sqrt{\text{zib}}$, a feature found also in Zu. *fipa*, be dim[*lib*>*tib*>*fib*]; or noting Sum. *gig*, equivalent to *zig* we may take *gib* (for *zib*)>*kib*>*fi*. Finally, $\sqrt{\text{zim}}$ gives us *zima*, go out (of fire); *omu-zimu*, a spirit=Sum. *gi-dum*; Kr. *rima*, darkness=Lb. *modima*; Nj. *mdima*, &c.

It should also be noticed that in a few cases *mb* changes with *ng*, and *vice-versa*; and further, that *mb* occasionally replaces *m*; e.g., G. *tomba* (coire)=Lb. *songa*=Zu. *soma*; Zu. *emba*, dig=Kk. *enja* (usual Bantu *sima* or *simba*, dig), Zu. *inja*, dog=Bantu *embwa*, Gir. *amba*, say, makes pass. *ambwa* or *angwa*.

From either point of view, radical or phonetic, the forms (ba)=zimba and zinj, are identical.

The variant *zang* for *zinj* developed in the Sudan into Zagáwa, and as Zanzibar for the island. Its kindred forms are to be traced in Kv. *male*, black—by metathesis for *lam*<*lag*, variant of *zag*, *zig*: Zu. *myama* [the addition of "m" to *nyam*<*lam* is curious, and may represent a reduplication (found in some other Bantu forms for black), *milam* or *malam*];=Nj. *da*.

The history of the Ba-zimba is therefore the history of the Zinj, or dark-skinned people, not the history of any one tribe.

Yours, etc.,

W. A. CRABTREE.

To the Editor of the JOURNAL OF THE AFRICAN SOCIETY.

SIR,—In a cable of June 29th Reuter mentions a lecture of Prof. Schwarz at a meeting of the African Society at the Imperial Institute in London, in which meeting Prof. Schwarz was speaking of the possibilities of the Kalahari, the meeting resolving to ask the Government (Union or Imperial?) to obtain expert evidence as to the possibility of the scheme.

It was mentioned that 10,000 square miles should be suitable for irrigation and immigration.

I do not suppose that Professor Schwarz mentioned that I am the author of this scheme at least as a technically possible solution. I handed in my first memorandum on this subject to the Colonial Office in London in the beginning of 1913, when it was proposed to hand over Angola to Germany for commercial purposes by the proposed Lichnowsky Treaty. Another memorandum was made for this Government in 1918, and several articles have been written in the South African

papers, the *Star*, *Farmers' Advocate*, also in the *African World*. More recently an article was published in the *South African Mining Journal*. I am not the original author of it, because, unknown to me, Mr. Barry May in 1907, then Secretary of the Bechuanaland Administration, proposed the construction of two canals of the Okavango, for irrigating each side of the immense Okavango swamps, which were to be drained and dried. This report is found in the collection of the Colonial Reports of 1907-8. His idea was to drain these swamps entirely, rendering 6,000 square miles of an extremely unhealthy country adaptable to agriculture. Professor Schwarz's proposal is to create another such unhealthy swamp by letting also the Malee into the Kalahari.

Originally his proposal was to form two lakes as big as Victoria Nyanza for improving the climate of the whole of South Africa. In this proposal there was no question of irrigation. As proposed the scheme was not possible because the spillway from Etosha Pan towards the Okavango does not exist. The rise of Owanbo River from Etosha Pan to Tsintsabis has been taken in a motor-car journey of four hours, and was found to be 370 feet. The level of the Oshanas from Amene River to Etosha Pan will be taken by the Irrigation Department, and I have no doubt that the Etosha Pan will be found of the same level as the town of Kumbé on the Amene. The filling of the Pan would then be impossible.

The lakes have not such an immense influence on the rainfall as made out by Professor Schwarz. Even the equatorial lakes do not show such influence except in the immediate vicinity of them. At Muanza, for example, the rainfall is 100 inches, but at Jabora it has been down to less than 20 inches.

But all this is simply a speculation. The truth is that we need this water at any cost for irrigation, and we cannot afford to lose it in these immense lakes. Any flood water must be stored in large deep reservoirs in Angola and North Rhodesia, and not in the lowest points of the Kalahari, from where we would have to pump it up to the higher lands. Even Victoria Falls would not be sufficient for it.

Prof. Schwarz has indicated irrigation along an imaginary river from Makari Kari to Malopo. But there is no such river. There is most certainly a watershed between Lababri and Okahandja, and if this watershed did not exist, how could the former Kalahari Lake have existed? But this lake did exist, and the channel towards Malopo did also exist. The conclusion is that the lake had an overflow over this watershed, and the possibility of irrigation of South Kalahari by a canal from the Okavango, taken out at Andara, depends entirely on this level of the watershed. I believe that it is 3,150-3,200 feet, and if so the canal is possible.

The district along the Okavango swamps and at N'gani is extremely fertile. The possibility of the irrigation by this canal does, therefore, not require any extensive investigation. The other canals from the Chobe and Zambesi may be more difficult.

In any case the irrigation will have the same influence as a lake. Very little water is taken by the plants permanently, and 95 per cent. of the water is returned to the air. We have the advantage over the lake in that way that we spread the water over a much larger area than the lake.

In this way the desert will be reduced to a certain extent, and the climate may improve as in Algeria and Tunis. The cause of the droughts has to be looked for at the Antarctic, and not at the equator.

The reason for which we need this irrigation scheme is the relatively small area irrigable by the Union rivers, and this area is entirely insufficient for any large immigration. In the Kalahari the 10,000 square miles=6,400,000 acres, are possible. But we have to look for the reservoirs in Rhodesia and Angola. Angola will be towards Kalahari what Abyssinia is to Egypt, and what Asia Minor and Armenia will be to Mesopotamia, because some immense reservoirs will evidently have to be built in the Euphrates if Willcocks's scheme be carried out to its full extent.

We have in the world in contemplation some very great irrigation schemes:—The Sind, £16,000,000, 5,000,000 acres; Sudan at Khartoum, £12,000,000; Mesopotamia, £20,000,000. The French scheme of the Niger at Timbuctoo can be extended to 20,000,000 acres.

All these schemes are for the natives—Indians, Egyptians, Arabs, Annamites. Kalahari will be for the white man at 3,000 feet altitude.

It is really the only place within the British Empire where we can put 1,000,000 white men on the land by means of irrigation.

Prof. Schwarz is therefore quite right to push forward the irrigation of the Kalahari, but there is a certain danger that a Government, finding his scheme impossible, may not take any more interest in it and neglect the technical solution of the problem.

It is this that must be prevented. Mr. Barry May's sound proposal has been pigeon holed for fourteen years. The necessity of providing cotton and cereals for the United Kingdom from a British territory is now so great that this scheme must be taken up at any price.

The Union Parliament has appointed a "Drought Commission." I do not yet know who will be the members thereof, but I hope that it will be composed of clear-headed, impartial men, and the whole problem will receive a serious investigation.

Another question connected with the Kalahari scheme is the broad gauge railway, Cape and Johannesburg to Gibraltar and London.

The first line will, of course, be Mafeking-Okahandja-Walvis Bay, continued by steamers to Dakar, and from Dakar by rail to London, all in ten days from Johannesburg instead of nineteen.

The next step is, however, the through broad-gauge line from Capetown to London in six days.

The French will now build the line through Cameroon to Leopoldville, and the British must participate in this line by a passage through Nigeria from Sinder to Yola.

The Belgians wish to continue this line in Angola to Capella on the

Loluto Bay-Katanga Railway, and Capella is only 900 miles from Letututu in the Kalahari on the line from Johannesburg to Walvis Bay. With the irrigation of the Kalahari these 900 miles will, of course, be constructed, and we will go in five and a half days from Johannesburg to London through the Gibraltar and the Channel tunnels, and this can take place in five years. By the narrow gauge Cape-Cairo over Constantinople it will be twelve or thirteen days, and over Stanleyville-Zamio-Agadir eleven to twelve days. These lines are, therefore, not of any value for the through traffic from South Africa to Europe.

Knowing now the true facts about these schemes, I hope that your Society will kindly assist in making the necessary propaganda for them in England.

I have written to a great number of persons of influence in England, but so far it is only Sir Rider Haggard who has taken any interest in it.

I thought that the Manchester cotton industry should take it up with enthusiasm, but they did not even reply, and prefer evidently the black and coloured cheaper labour of all the cotton schemes that they have recently proposed. If it is possible to get some British papers to take it up, it would not be impossible to get some of the rich men here to put up the money for the preliminary expenses of investigation. For this we do not need any experts from England. We know ourselves exactly what South Africa requires, and all that we need is money to travel through the desert.

For eight years I have tried in vain to get this little money. It may now be possible through the "Drought Commission" to get it, but the first investigation should have been done this year.

Yours faithfully,

AUGUST KARLSON.

172 Mears Street, Pretoria, July 4th.

I am sorry that I have not got an article written in the *Sunday Times* by Professor Schwarz four months ago. In this article he described irrigation as a failure in the United States as well as in South Africa.

Now he advocates the irrigation of 10,000 square miles in the Kalahari.

He was unfortunately right about the commercial failure, but that has an initial cause, which is the want of *cheap fertilisers*. Without such cheap fertilisers irrigation for cereal crops even at present prices is a failure.

But there is no difficulty in manufacturing these cheap fertilisers, and with intensive crops as grown in some parts of Europe irrigation will be a commercial success. As Willcocks proposed already in 1904, these cheap fertilisers must be supplied by the State. The Imperial and Australian Governments together have now bought the Nauru Island, so we are rapidly coming towards this unavoidable nationalised industry of fertilisers. These are the indispensable conditions for any large irrigation scheme in the Kalahari or elsewhere, which must be based on cereals, and not only on fruit, cotton, sugar-beet, and lucerne, of which there would quickly be an over-production.

JOURNAL OF THE AFRICAN SOCIETY

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NOTE.—There are many subjects in Africa, such as Racial Characteristics, Political and Industrial Conditions, Labour, Disease, Currency, Banking, Education, and so on, about which information is imperfect and opinion divided. On none of these complicated and difficult questions has Science said the last word. Under these circumstances it has been considered best to allow those competent to form an opinion to express freely in this Journal the conclusions at which they themselves have arrived. *It must be clearly understood that the object of the Journal is to gather information, and that each writer must be held responsible for his own views.*

NOTICE TO MEMBERS

ON account of the very greatly increased cost of paper and printing, the issue of the Society's JOURNAL is now three times as costly as it was before the War, and, similarly, rent of offices and most other things connected with the maintenance even of a small staff are dearer than in former times. Consequently, THE AFRICAN SOCIETY, in spite of increased membership, has, since 1915, been carried on at an annual loss. The only way to attain stability in money affairs is for the Annual Subscription to be raised. This was considered at a recent Council meeting, and it was decided to recommend that step to the approval of an Annual Meeting.

On December 9th the question of raising the subscription from One Guinea to One and a Half Guineas was put to the Annual Meeting, and was unanimously approved by the Members present. Consequently, Members of THE AFRICAN SOCIETY are requested to amend their banking orders, and raise the amount of their subscriptions from £1 1s. to £1 11s. 6d.

The Council earnestly hope that not only will the general

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body of Members resident in both Africa and Europe approve of the decision, but also will co-operate with the Council in securing fresh Members, and thus by putting the Society on a thoroughly sound financial basis enable it to develop those essential activities which are now more than ever necessary in the interests of Africa.

A Fund has been started in London for wiping off the Society's deficit of £550, to which the late President has subscribed. Subscriptions, however small, from Members of the Society at home and abroad for this purpose will be gladly received by the Secretary and duly acknowledged.

The object of the special Fund is to pay off the overdraft at the Bank without selling out the Society's Trustee Securities while they stand at a depreciated value.

H. H. JOHNSTON,

Late President and Chairman of Council.

SIR HARRY JOHNSTON'S ADDRESS ON RETIREMENT FROM THE PRESIDENCY

THE following is a summary of the Address delivered by the retiring President (Sir Harry Johnston) to the Members of the African Society at the Annual Meeting on December 9th, 1920 :—

The present membership of the African Society is 733. Sixty-six members were elected during the year, including three life members. A number of interesting meetings have been held, either as luncheons, dinners, or afternoon gatherings, at the Imperial Institute or at King's College. The subjects of the addresses and discussions at these assemblies have been published in the JOURNAL or will be published in the next number.

Regret has been expressed in certain quarters that there have not been more dinners and luncheons given under the auspices of the African Society, at which members recently back from service in Africa might meet friends and have an opportunity for the informal discussion of African topics. The Council have by no means lost sight of this opportunity for linking together men and women of all shades of thought who are united by the bond of a common interest in Africa. But the relatively enormous increase in the charges of London restaurateurs for providing meals of good quality, even though of simplicity, has temporarily brought about an intermission in this form of social function. The attendance at such luncheons and dinners was not sufficient to ensure the Society against loss, and any further increase in the cost of tickets would have probably led to an even smaller attendance.

There is no doubt that the formation of something like an African Club alongside and intimately con-

nected with the African Society—a club which might take over the responsibility for these social meetings—would greatly increase the amenities of African studies in London. Members of the Society are often prone to confide their experiences and knowledge of Africa to one another at such social gatherings who might not be willing to put them into a formal article for publication. But any such movement as this requires money, and it is difficult to see where these funds are to come from in the present state of our depleted finances.

Moreover, the President and Council have had to remember that three-fourths of our members either live in Africa permanently or are employed there for a considerable period of their lives, and the first thing we have to maintain is the Society's JOURNAL, which is the surest way of preserving and spreading a knowledge of the African continent and its peoples. The retiring President cannot conceive of members abroad continuing their subscriptions towards our Society unless they received, at least once a quarter, our JOURNAL. To put it plainly, that is the one solid satisfaction we get for our annual subscription. Neither dinners nor luncheons appeal to me, nor, I dare say, to some of my fellow members who, like myself, have grown old in the African service. They entail an expensive journey up to London, and very often also the cost of a night's accommodation in London. Our digestions jib at restaurant fare, and we would sooner read an address in cold blood than hear it recited. We therefore stake our faith on the issue of the JOURNAL as proof that an African Society is needed, and that our present realisation of it has produced, at any rate, a moderately encouraging result.

Unfortunately, however, the cost of printing the JOURNAL has increased to something like three times the pre-war charges. But for this we should be solvent; our income from a greater number of members than we have hitherto possessed would suffice to pay our small staff of officials, our rent, and all our other charges. But, owing to the rise in the cost of paper and printing, this is not the case. Our dinners and luncheons and most of

our afternoon meetings where tea is provided gratis by the Society have involved us in a slight loss (expenses being more than receipts), and the greatly increased cost of producing the JOURNAL adds to the annual deficit, which at the close of 1919 was £119 9s. 11d., and which promises to be about £425 at the end of 1920.

We are proposing to meet our total deficit, our overdraft at our bankers (approximately £550 on December 31st, 1920), by selling out some of the stocks and shares in which our reserve funds were invested many years ago. Unfortunately, these "trustee" securities have depreciated very considerably in selling value since the original investment took place, and we shall lose in effecting a sale in order to redeem our overdraft at the bank. Consequently, if our members who could afford it saw their way to contributing sums (however small) to the special purpose of wiping off this deficit of £550, we might be relieved of the necessity of selling out our stocks and shares while the market was in such a bad condition, and the African Society would face the New Year in a more affirmed position.

The increase in the members' subscription of half-a-guinea (£1 11s. 6d. in all) per annum is strongly recommended to you by your Council. In fact, if the measure is not passed at this Annual Meeting of December 9th, 1920, and endorsed by the great majority of the members, the Council can see no alternative but the dissolution of the African Society while it still possesses the requisite funds to wind up its affairs and pay its indebtedness to its staff and its present landlord. Our working expenses cannot be criticised as heavy. Indeed, as retiring President, I should like to thank our only two paid officials—my co-editor of the JOURNAL and our Acting Secretary—for having so long done the work of the Society for a very small payment, and done it so cheerfully and with little regard for their own convenience. I doubt also whether in the present year of grace we could have found a landlord more considerate as regards rental and accommodation than the Director of the Imperial Institute.

Every regard will continue to be had for economy, but I do not think we can expect to conduct our main business of

holding meetings and embodying the results in a printed journal at a less cost than that which is detailed in our accounts. What, of course, we should like to see come about would be such increase in the membership, and consequently in the funds, as would permit of our publishing the JOURNAL monthly, not quarterly. We are really embarrassed by the richness of our material. It is disheartening to have to keep back for months information of real importance in the study of Africa.

During the past eighteen years I have lectured and privately pleaded in most of our great provincial cities and subsidiary capitals on the need for a Society like ours, which undertakes the scientific study of Africa. I have pointed out that to maintain successfully and permanently our enormous commerce with Africa and our rule over such a large proportion of that continent, we must come to understand Africa, and to understand, not only British Africa, but also self-governed South Africa, French Africa, Italian, Spanish, Belgian, and Portuguese Africa, and the native states that are either independent or at any rate self-governing. But I have preached to deaf ears. Individual men and commercial associations that are making thousands a year—a million a year, may be—out of Africa will not contribute even a guinea a year to our maintenance, though if they read our JOURNAL diligently they might light upon many a notion for making Africa an even better paying proposition than it already is. But that is characteristic of us as an Imperial people: an extraordinary meanness in regard to endowing accurate knowledge and scientific research which does not lead to the return of your cash with fifty per cent. profit in six months. Our main support is, and continues to be, the comparatively poorly paid workers in Africa itself, who are building up the vast wealth of our African commerce.

Sometimes an excuse is offered when the rich man is pressed for an answer. He tells us either that he would give a few guineas more than his subscription if we would attack such and such a system, a law, a nation, a traffic; or again he would, or his colleagues would, whip up an interest in the Society in the City, in Liverpool, in Manchester, Glasgow,

Edinburgh, or Bristol, if we would defend a policy, a type of administration, a kind of legislation, which is attacked elsewhere. I need hardly say the African Society is precluded from receiving assistance to which such conditions might be attached. It has been from its first conception, and has remained, purely a scientific society, aiming at the quite impartially scientific study of Africa. It was never intended that the African Society should usurp the functions of the Royal Colonial Institute, the Aborigines Protection Society, the Congo Reform Association, or any society for the attacking or defending of Alcohol or Free Trade. I am not even aware that in its inception it was intended to make it a purely British society for the study of British Africa. We have a number of members of foreign nationality, and papers of great value written by citizens of other nations interested in Africa have appeared in our JOURNAL, and will, I hope, continue to appear. We seek world suffrages as a scientific society dealing with the whole African continent, and especially with the human inhabitants of all racial types and affinities inhabiting that division of the earth's surface. We have been advised to confine our survey and sympathies to West Africa; to consider Egypt and South Africa outside our domain. Nonsense! All Africa is our field, from Algiers to Cape Town and from Zanzibar to St. Louis de Sénégal. For the very good reason that all Africa is interdependent. The mammalian fauna of Algeria twenty to thirty thousand years ago bore a striking resemblance to the fauna of Cape Colony at the same period; the Wolofs of Senegal in many ways recall the Swahilis of Zanzibar, and Ancient Egypt was the originator of all the Negro's simple arts and industries, of his games, his weapons, and his religious ideas, until the great European invasion of Africa which began five hundred years ago.

Many suggestions have been made to your Council by friends and Fellows of the Society as to how the vogue, the funds, the membership, the influence, of the African Society might be increased. These suggestions, other than those to which I have obliquely alluded, were quite legitimate. A few of them have been adopted, and have proved beneficial. But the majority required for carrying into effect a good deal

of money, and, as we lack this resource, we have had to put them on one side.

Four times I have been President of the African Society since its foundation eighteen years ago. I am now retiring from this position finally. But I like to think that some months ago your Council appointed me co-editor of your JOURNAL in an honorary capacity; and in that direction I hope to be able to place at your service my experience of Africa, which now extends over a period of forty-one years.

H. H. JOHNSTON.

THE ILA-SPEAKING PEOPLE OF NORTH RHODESIA¹

SIR HARRY JOHNSTON, if I am not mistaken, speaks in one of his books of the "wild and interesting Mashukulumbwe." It is of those people I am speaking this afternoon, only I call them by their proper name, Ba-ila. His adjectives were well-chosen: they *are* wild, and they *are* interesting.

They live on the Kafue River, one of the affluents of the Zambesi. The Kafue flows, in its middle course, through an extensive plain, apparently as flat as a billiard table, and flooded in the rainy season. The true Ba-ila live on the edges of this plain, and graze their cattle, of which they possess vast herds, and of which they are intensely proud and fond, in the plain itself, when it is not flooded. It is a magnificent cattle country. Colonel Gibbons, who had a very poor opinion of the people themselves, was quite enthusiastic about the country: he said it was the finest country in Africa. I do not make the same claim for it, but certainly it is a fine country. For much of its middle course the Kafue meanders in a monotonous fashion through the plain, but further up it is a very beautiful river. Many of its tributaries lose themselves in the plain during the dry season, and only meet the main stream when they flood during the rains.

North and south of the Kafue plain the land rises. Here you have other tribes, such as Balumbu and Bambala, which, while they speak Ila, are not Ba-ila in the strict sense that the people of the plain are.

Among the Ba-ila there are various physical types. The slave-trade, carried on by Arabs, Mambari, and by the people themselves, has resulted in a mixture of peoples. One can

¹ This paper was read at a meeting of the African Society held on October 29th, 1920, when Sir Harry Johnston occupied the Chair. For report of other proceedings on this occasion see p. 139.

distinguish two main types, the one tall and handsome, the other short and ugly. It may be that the latter represents a people which inhabited the country before the Ba-ila came into it.

Until comparatively recently the Ba-ila men went about naked, and even now do not take readily to much clothing. The women, when young, are often remarkably fine. They dress now, and always have done, in a petticoat of the lechwe doe skin. Both sexes are very fond of ornaments.

The work of the village is strictly divided between the men and women; men will not do women's work, nor women men's. No woman is ever elected a chief, but they occupy a position of considerable importance. A feature of Ila law is the recognition of woman's right to hold property. The women have a short and easy way of expressing their resentment when a man does something that offends their sensibilities. They go on strike. They down tools—hoe and pestle and cooking-pot, and the men, faced with starvation, are compelled to apologise for the behaviour of the offender, and to propitiate the women of the village with gifts. Women work hard, and in some respects their lot is a hard one, but on the Kafue, as elsewhere, they know how to get their own way. The hand that wields the pestle rules the tribe.

The tribal marks of the Ba-ila are three in number. They make three cicatrices in each temple. They take out the upper incisor teeth. This is done to both boys and girls by the application of a hammer and chisel. Then the men have a head-dress which is quite peculiar to themselves. The young boys' hair is allowed to grow in a tuft on the crown, and after initiation this is gathered up into a cone, four or five inches high. This is the *impumbe*. It is nowadays ornamented with brass chair nails. This head-dress undergoes a further development into the *isusu*: the cone is broken down, other hair is added to it, and it is sewn, the stitch being the same as that used in smocking, into a tall, narrowing coiffure, terminating in a thin slip of sable antelope horn, the whole being three or four feet high. I think this characteristic head-dress originates in the desire and necessity of

the men knowing each other's whereabouts while hunting in the long grass. It is quite a handsome feature of their appearance.

Ba-ila men are very keen hunters, and very plucky in attacking lions, etc. Until the advent of the Pax Britannica they were always at war; there were old, undying feuds between the various communes; alliances were formed, and raids continually made. Now they can no longer indulge in this, but they would like to do so. They had no guns to speak of, and no kerries or shields. They fought only with throwing spears, bows and arrows, and axes. Nowadays they still hunt, and the abundance of game in their country affords them plenty of opportunity. They catch immense quantities of fish in the rivers, and dry it for sale and home consumption. They till the soil, and get good crops of maize, and Kaffir corn.

They are not very skilled in handicraft. They turn bangles of ivory on rude lathes. The women make baskets and pots of various patterns. Iron-smelting is carried on by the Bambala and the local Ba-ila; blacksmiths fashion hoes, spears, razors, and other things. In woodwork they are not clever. Apart from bowls, stools, canoes, spoons—all carved from single blocks of wood—they make little.

The Ba-ila are grouped into communes, each consisting of several villages and presided over by a chief, who is elected to the position. There is no paramount chief, and, except among the Balumbu, among whom the chieftainship descends to a brother or nephew, there is no hereditary succession. The chief is assisted in all councils by the head-men.

The clan system still exists among the Ba-ila. These clans are totemic in character—that is to say, are named after certain animals and plants which are held in reverence by the clansmen. There are the Lion-clan, the Baboon-clan, etc. The reverence is shown in not eating the totem, though this in many cases is now becoming obsolete. The Cattle-clan formerly, for example, ate no beef, nor drank milk, but now do both. The system has an important part to play in the social life, inasmuch as it regulates marriage. The clans are

exogamous. A man does not marry a woman of the same clan. Members of a clan are linked together in firm bonds of comradeship.

The system of age-grades also exists among the Ba-ila—a system in which men (and women) of the same age are banded for mutual support.

The less said here about the sex relations of the Ba-ila the better. Suffice it to say that they border upon the promiscuous. Women are bandied about from man to man. Divorce is common, and the majority of cases that come before the magistrates are due to sex.

The slave-trade which flourished among the Ba-ila no longer exists, but domestic slavery is still an institution. It is now being gradually destroyed by the B.S.A. Co.'s Administration.

During my long residence among the Ba-ila I have been especially interested in studying their religion, and have reached conclusions which are recorded at length in the book published by Captain Dale and myself.

I think that at the root of everything there is a belief in an all-pervasive energy. I call it Dynamism. This X is something impersonal, unethicial. The Ba-ila seem to have intuitively, blindly reached a conclusion that reminds us of the latest theories of physical science, which analyses all matter into energy. This X can be tapped by men and put to use,—to good use or evil, according to their intention. Thus the physician (*munganga*) finds the energy in various plants and employs them not only as medicines, but as amulets and talismans for bringing good fortune or avoiding evils of various kinds. This part of Ila life is extraordinarily interesting. We have devoted a long chapter of our book to it. The diviner (*musonzhi*) employs this energy, as manifested in various things, for the purpose of detecting criminals, finding lost things, and diagnosing disease. These two are beneficent in intention. On the other hand, the warlock, or witch (*mulozzhi*), uses this energy, again manifest in various things, for bewitching his fellows. He is dreaded and hated above all others. For ordinary people, unprotected and unauthorised, to meddle with these hidden energies is

unlawful. People at various times, and under certain conditions, are brought into intimate contact with the X—as at marriage, etc.,—and are therefore dangerous to other members of the community. They are therefore in a state of taboo.

We are here, I believe, at the root of the ethical system of the Ba-ila. Apart from laws and regulations, as we understand them, there is this extensive system of *taboo*, the which is one of the most important things to understand in the life of the Ba-ila. I cannot go further into it here.

This Dynamism forms, as it were, the ground-work of the Ba-ila philosophy. But the hidden things of the universe are not all impersonal: there is also a belief in personal beings who influence their life for good or evil. These beings are mostly, if not entirely, the ghosts of the departed. The funerary customs of the Ba-ila show clearly that they believe firmly in the persistence of the human personality after death. When a man dies he departs into the spirit world, which is not usually regarded as placed in some distant land, or beneath the earth, but in intimate contact with this world of ours. The ghosts live in the houses inhabited by the relations or in the adjoining forest. Most of them return to be re-incarnated in newly-born children.

The ghosts are regarded, some with dread, mostly with reverence. Every man and woman has a personal guardian-spirit, which is at the same time a part of himself or herself: a higher component of his own personality, which counsels and guides and protects, and to which he offers prayers and gifts.

Apart from this there are the family divinities, the ghosts of their departed relatives, temporarily resident in the spirit-world. To these also prayers and offerings are made.

Above these are the ghostly guardians of the village. And each separate commune has its divinity—some ancient chief, who has never been re-incarnated, but remains ever in the spirit-world. These are regarded with very great and impressive awe, and festivals are annually held in their honour.

There is one divinity, named Bulongo, who is revered by all the Ba-ila.

All these divinities (*mishimo*) make their will known to the living through mediums.

Separate and apart from all these there is Leza, the Supreme Being, whose sphere of action is cosmical. He is manifested in the rain, the wind, the thunder, and lightning. He was never a man, and comes little into contact with individuals. He is distant and rather otiose, and the divinities are his intermediaries.

This is a very hasty and incomplete account of the religion of the Ba-ila.

The Ba-ila are an intelligent people. Their language is a very fine instrument, far finer, one thinks, than they have hitherto needed for life.

It is only within recent years that they have come into contact with European civilisation. The first white men to settle among them were missionaries. The mission work has been very difficult. They do not take readily to education, and progress has been very slow. Yet the missions have laid a firm foundation among them.

The B.S.A. Co. has been fortunate in having a succession of very able men in charge of the Ba-ila. The Ba-ila have been blessed with such magistrates as my friend Captain Andrew Dale, one of the finest and most sympathetic administrators I have ever known. They have not taken readily to European control, but seem to have settled down now to peaceful ways. I may be permitted to bear my testimony here that the B.S.A. Co. has conferred many conspicuous benefits upon these tribes.

Trade with the Ba-ila has been largely in the hands of travelling merchants. Some stores have been founded by Greeks and Jews. The trade is principally in grain and cattle, and with the proceeds the natives are buying European textile goods and other things.

EDWIN W. SMITH.

NATIVE EDUCATION IN CENTRAL AFRICA

I FEAR that some readers of this JOURNAL may consider me guilty of what the late Lord Fisher called "damnable reiteration" in reverting to this subject; but I am impelled to do so for two reasons: Firstly, because of the paramount importance of the subject, since every serious student of African problems knows that unless we grapple with education we will never make anything of Africa; secondly, because so far I have failed to find a real *policy* clearly defined by anyone; and in the outlines which have been suggested in a sketchy manner the tendency appears to me to be to insist on advanced twentieth century methods, which are not so suited to Africa as, say, those in vogue in the sixteenth and seventeenth centuries in Europe.

I. *The Necessity for Education.*—I propose, in this article, to take this for granted, as it is not seriously in dispute; the necessity being admitted by at least ninety per cent. of those entitled to a hearing. The necessity is admitted, roughly speaking, for two reasons: (i.) our duty to the natives, for whose well-being we have assumed responsibility; and (ii.) because the native is the chief asset which Africa possesses, wherefore, unless we develop the asset, we will accomplish very little in the way of regeneration.

In its broadest sense, all contact with Europeans educates natives. Much of this "education" is bad; all of it is aimless. To be content with getting natives to work on mines, on farms, on railway construction, carrying loads—in other words, earning money and spending it in the stores—is not only a blind alley educationally, but it leads to the deterioration of the natives. Put bluntly, we are not only leaving each generation as badly off as the previous one, but *worse off*. Only by sane education can we remedy this—and by education we must remedy it. After twenty years' close contact with the natives, I am sure that the alternative to right education is ever-growing unrest.

II. *Nature of the Education.*—Education in this sense may be divided into three branches. (i.) Religious and moral.

(ii.) Clerical—from the A.B.C. to higher education. (iii.) Industrial and agricultural. I believe that the first should be left to the Church (the Missions), and the second and third become the affair of the State; but they should go side by side with the first. The Missions should continue to do the work which they are doing in different centres, but, in addition to this, when the State opens a training school, a Mission should be asked to open a branch close by, or put in a resident chaplain and staff; so that the pupils, while at school, will always have moral and religious help and guidance close at hand. We will do no good in Africa if we try to build up a religionless-educated class; and as the pupils will be taken at an impressionable age, this joint instruction will have a great effect on their characters, as well as on their work.

As regards the State branches of education, I unhesitatingly put the industrial side first; and this priority should, in my opinion, always be borne in mind. At one State school—the only one in a particular protectorate—the proportion of teachers, both white and black, is three to one in favour of the clerical as against the industrial side. This should be reversed. I do not say that all clerical teaching, or higher education, is bad for natives. On the contrary, not only is there an obvious opening for a certain number of trained clerks, etc., but the door should always be open for those with a special aptitude for higher mental training, whose value to the continent and to their fellows will be great in the future. Nevertheless, to create, thoughtlessly, an army of clerks will tend to lead to a blind alley as surely as will the casual employment of a purely muscular nature referred to above. It may be objected that the native *wants* clerical teaching, and *does not want* industrial training. Granted: I know it. I know it as well as any critic can know it, and I do not care if it be so. As a child I *wanted* to be a tram-conductor and to drive a butcher's cart, *but* I was not allowed to have my way. Had I been allowed to do as I wanted, I could, justly, have blamed my parents when I was older. Similarly, if we allow a large number of natives, just because they want it, to develop into an army of unwanted clerks, they will, with equal reason, turn and rend us—their guardians—later on, for training them to a profession at which, in such numbers, they will be unemployables.

Not only will they turn and curse us, but they will become agitators and will use their learning to stir up discontent.

If the natives want clerical education, they must have it, at first, as a supplement to industrial training. (Later, those who show special aptitude can be transferred to the clerical side.) If they will not come in for a maximum of industrial training with a minimum of clerical instruction, I consider that some compulsion should be used. I might add that, while not advocating compulsory labour, owing to the dangers inherent in such a system, it is, nevertheless, a fact that—granted good conditions—many of the Central African natives prefer compulsory to voluntary work. Many of us knew this years ago, but directing compulsory labour for war work for four years emphasised it. Reverting to education, I believe enough volunteers will be forthcoming without any difficulty; but, if not, I cannot see that that should prove an obstacle. To make a fetish of voluntarism in this way is merely paying lip-service to freedom. If one carries it too far, one is not giving them freedom, but perpetuating backwardness and the helotry of unskilled manual labour. A little compulsion, wisely applied, will lead toward freedom and away from slavery.

III. *Apprenticeship*.—The education of the Central African native will never succeed if the pupils can come and go when they like. An English schoolboy cannot do so: no more should an African. If we wanted a big army in Central Africa, we could get it easily, but we would naturally insist on enlistment for three, or more, years, with re-engagements. If this is right for a fighting army, why not for an industrial army—for an army of useful citizens? Incidentally, the fighting races need attention first. Under tribal rule their young men had to serve their time in the "army": it was their occupation between certain years, and their duty to the State (the tribe). As we are not going to keep more troops than are needed for police work, how are we to replace this occupation, this State duty—and its educative discipline—if we do not organise a system of useful education?

A certain number of youths should be taken yearly as apprentices for three years: given good instruction in simple trades and crafts, some elementary clerical work—not for-

getting religious and moral training alongside. At the end of three years there would be re-engagements according to the aptitude of the pupils. After the first spell the pupils could be allowed to marry, and have their wives and families with them (increasing scope for the mission adjoining the school). Tribalism in Africa cannot survive for ever in contact with the individualism of the governing races. We simply must start something now to take its place when it totters, or Africa will fall with it. A system of apprenticeship and guilds will probably do as well as anything to replace it, or to buttress it during the trying intermediate stages in the evolution of the African native. It is, I hope, hardly necessary to emphasise now—to readers of this journal, at any rate—the fact that this evolution is to-day taking place at a rate unparalleled in history; and that, therefore, it needs our most serious and sustained attention.

And when the pupils go out into the world? That is, in detail, beyond the scope of this article; but, put briefly, there will be two careers open to them, both of which will help the material development of the continent: (i.) As artisans in the trade they have learned, or as skilled assistants on European farms; or (ii.) as instructors in village schools in their own tribal area, and as advanced farmers “on their own.” In either case we should have men with the main ideas of a Christian life; ideas of decent living; the power to do good work and earn a decent wage—in a word, decent, self-respecting citizens, instead of a mass of natives who, admirable as they are in many ways when in a state of pure savagery, often become degraded savages after indiscriminate and uncontrolled contact with European civilisation.

IV. *Village Teaching*.—This is, in many ways, more important than the apprenticeship and training schools outlined above, because to raise the African native, *en masse*, one must start at the bottom, in the village, kraal or *shamba*—the centre of tribal and family influence—and work upwards; not *vice versa*. I put the apprenticeship first, however, because one needs to train the teachers (who must always, while at school, be carefully taught to respect and obey those over them, so that on their return to village life they will respect and not despise or flout their chiefs and headmen). The Fifth Com-

mandment is not the least important of the Ten. Village instruction in the simpler arts and crafts can start at once, but it can never become a living force without a constant flow of instructed natives returning to their homes to teach, and showing—by their skill and success—the advantages of education. Need I add that, in teaching, discrimination should be used? Smelting and blacksmith's work should be taught to natives who live in a country with iron; cotton-spinning and weaving to those who live where cotton can be grown; ploughing, tanning, and saddlery to cattle-owning natives; joinery to those in timbered lands, and so on; while all could learn some methods of better building, such as *pisé*, and the rudiments of agriculture—to say nothing of simple sanitation, etc.

In a short time (as history counts time) we would transform Africa for good. At present we are doing very little, and what we are doing is, largely, not in the right direction.

V. *Selection of Teachers.*—This is most important. We all know that the teaching profession is very mixed at home. (Not only was I lucky when I was a boy in having very fine masters, whose influence I gladly acknowledge; but I have been tutor and schoolmaster, too, so I am in no way prejudiced against the profession.) Though many a teacher is really gifted and has a "call" for his (or her) work as true and as real as the best clergyman has for his; yet, unfortunately, there are many schoolmasters, governesses, etc., who only undertake teaching because they are unable to earn a living in any other way. This is fairly serious at home, but it is fatal in Africa. Experience shows that when once such an incompetent teacher settles in Africa he does not leave. He does not live in luxury, as some sneerers at missions make believe; but he does get a greater competence and freedom from real want, with less exertion, than he could get in any other way—and he does incalculable harm.

All teachers of natives, mission or State, should be licensed, as are medical men. If we do not allow unskilled men to minister to people's bodies, we should not allow the unskilled to minister to their minds. Before the licence is granted, the Government should satisfy itself that the applicant is of a good moral standard (a "straight" man and a clean liver); has qualifications for teaching; and—last but not least—has

self-control : in few professions is it more needed ! If, after a period, an examination of the teacher's pupils shows him to be unsuited for his work, his licence should not be renewed. It does not matter about the necessity for him to earn a living ; he must not be allowed to earn it at the expense of our African " wards " ; if he cannot teach them rightly, he must find some other means of sustaining life. A very large percentage of the missionary staffs in Africa would have no difficulty in obtaining and keeping their licences ; and their truly noble profession or calling would be all the better for the departure of the minority who are doing no good here. It would do the minority no harm either to quit the work for which they are unfitted.

If this is important in the mission schools, where one can generally take Christian ideals for granted, it is still more important in the State (secular) schools. The teacher's example must be in harmony with that of the missions adjoining (or of the resident chaplain and staff), which will be looking after the religious and moral welfare of their pupils ; and—if education is to be a success—all the teachers must be people who have a liking for teaching, and *can teach*.

" The world looks to Britain for a lead," " Let every baby born have a sporting chance," were two sayings of the Prince of Wales in 1919. Will Britain give a lead in Africa now, and let her wards have a sporting chance ? If so, will the Government give us a *policy* for education in Africa ; and, before choosing one, study the guild and apprenticeship system, and take the advice of those who are qualified by experience and study to give it ?

Africa has many workers who are anxious not to betray their trust ; but they can do little without a policy from those above them. If they fail the responsibility will not be theirs, but will be that of those at home—glibly calling themselves trustees—who will not move in this matter. Let Britain lay down a policy and grant the initial capital. Africa and Britain will produce the men to start it. Then " the native problem " will be on the road towards solution, and the regeneration of a continent will have begun.

AFRICANUS.

SOMAL TRIBAL LAW

I.

SOMAL tribal laws are complicated in the extreme because they are unwritten and for other reasons. They are based on the Koran, and are considered very binding by the people who happen to be claimants or complainants, not quite so by those who are not; this is one of the other reasons. The clan is held responsible for the acts of its individuals, and an offence against a person becomes the affair of his or her clan; therefore, to avoid blood-feuds and tribal friction, the serkal does not encourage the evasion of penalties incurred through infringement of tribal laws, even though such penalties have no parallel within our own or the Indian penal code. The whole system is based on compensation—compensation for anything and everything.

Certain acts committed with intent—for instance, homicide or grievous hurt—cost no more in damages than the same acts perpetrated accidentally. Compensation due or paid in settlement of a man or woman killed by another is called *dia* or *diya*, and it is no unimportant work of an administrative officer in Somaliland to see that *dia* cases are settled in full. If they are not, the blood-feud eventuates, and there is no knowing where it may end. If Musa Ismael, Gadabursi tribe, sub-tribe Rer Nur, Rer Fara Nur, kill Kalinleh Fahayeh of the Issa tribe by accident, in fair fight, or by cold-blooded murder, there is only one thing to be done about it. The Rer Fara Nur section pay to the murdered man's section a *diya* of one hundred camels. Had it happened to have been Kalinleh's sister who was killed, the *dia* payable would only have been fifty camels; thus one man is valued at two women. Of the *dia* payable, Ismael is responsible to his section for one-third out of his private property; if he has none his relations pay, but his section

is responsible for a full settlement. One-third of the *dia* is paid to Fahayeh's relatives; the rest goes to his section. If by any chance the Rer Fara Nur or their tribe refuse to settle, Fahayeh's clan (and tribe probably) are going to see about it, and the chances are more blood will be spilt ere the affair is settled. That is why administrative officers take *dia* claims so seriously.

Dia is really a Muhammadan institution, and a very valuable one, too, in a savage land; for obvious reasons it encourages a healthy public opinion. In this wild land, peopled by nomads, men would never report murders just for the sake of seeing the murderers hung, and Government would stand as little chance of hearing about murders as of the gazelle slain by the hyænas and jackals at night. But where a man is due compensation, according to his own tribal law, for the death of a relative, he reports at once, so that he may run no risks of forfeiting his claim. Of course, the higher the rate of *dia* payable the greater deterrent it becomes to murder and homicide.

Although the rate is now more or less settled, at one time it varied considerably amongst different tribes. Twenty-eight years ago the Issa, who are a poor tribe, had an agreement with the Gadabursi that the *dia* payable between the two tribes would be ten she-camels, ten cows, one hundred sheep, and a marriageable girl with all her kit. At that time the payment of a girl in marriage was considered a very important and desirable item of the *dia*, as, whenever a male child was born of such a marriage, any blood-feuds between the tribes concerned were at an end. Nowadays the above tribes pay the full *dia* of one hundred camels, and the girl is left out of the contract.

Compensation and *dia* sound very simple, but consider the bewilderment of the poor D.C. when he finds himself trying a case like one that cropped up in my court to-day. An elderly Somal walked up to my table to enter a claim for compensation.

"Name, please?" I asked.

"Fara Haid, Gadabursi, Makahil, etc." All entered under heading "Plaintiff" on the case form.

"Defendant's name?"

"Hadiyo Muhammad."

"Nature of claim?"

"Compensation for a wound." Under the heading "Claim" I enter "Wound."

"Now show me the wound or scar," I ask.

"It is not I who am wounded; it is my son."

"What's his name?" I asked, patiently.

"Yusef Fara." I amended the plaintiff to Yusef Fara through his father.

"Now he is a small boy, I presume; was he badly hurt, and how?"

"He is a small boy; he was hurt, but not seriously, with a stick."

"Who hit him?"

"The defendant, Hadiyo Muhammad."

"Did you ask her [Hadiyo is a woman's name] for compensation?"

"No, but I asked her brothers, and they threatened to cut my throat!"

"Where is Hadiyo now?"

"At my encampment."

"Well, if I tell a biladier¹ to accompany you, can you bring her and the small boy in?"

"Sahib! Hadiyo has nothing to do with it; it is my brother-in-law who must settle this claim!"

"Ho-ho! so Hadiyo is your wife; and by any chance is she also the mother of the complainant?"

"Yes, Sahib. She is."

A case of this sort turning up in an English court would have been dismissed. I could not dispose of it in this way, so went on to the bitter end, and solemnly addressed the following queries to the Kathi: (a) "If a woman wound a man, who is responsible—the woman's husband, or her relations?" (b) "If a woman wound her own son, who is responsible—the woman's husband (who is the father of her son), or her relatives, or both?" This missive was handed to the Arabic clerk, who transposed it into Arabic as I sat absent-mindedly

¹ Biladier = Special Constable.

trying to recollect an old catch about a conductor with red slips, pink slips, and white slips, that he punched, or didn't punch, for I couldn't remember. By and by back came the answer—"In both cases the woman's relatives are responsible." I am none too sure that this decision is correct, but then the Kathi is a very learned man. I called an Akil² and instructed him to take the elderly Somal out to his home, and there, if possible, settle the matter. It was settled outside the court between the parties, who, hearing a case was afoot, had all turned up.

As a matter of fact, in most cases where a married woman incurs a penalty her own and her husband's tribe are jointly and equally responsible for its settlement. In the case of a widow the matter becomes slightly complicated; the deceased husband's tribe may deny responsibility, which the woman's tribe are anxious they should share. A case of some interest came up for hearing a few days ago. An elderly woman petitioned for compensation against another, who, it transpired, was the second wife of her own husband. The plaintiff and her husband belonged to the same section of the Issa tribe; the defendant—the second wife—belonged to another section of the same tribe. The husband claimed that the section or relatives of his second wife should pay damages for the broken head of his first, solemnly assessed by the Kathi at rupees fifty-seven annas eight. Who pays? It would require a Solomon to decide.

Talking of Solomon, it is a sound plan to keep his judgment in mind. An instance of how it can be applied occurred at Berbera not long ago. A man complained to the D.C. that he had purchased five gosras of dates from a trader, paid for them, removed four, and, returning for the fifth, was refused delivery. Why he had not taken away all five immediately, he explained, was because, after the purchase, he found one gosra was of inferior quality, and the trader, who had no more dates in stock, promised to procure another by evening in its place. In court the trader swore he had sold four gosras to plaintiff, who took them away at

² Akilo: Headmen of clans or sections, whom they represent in all affairs concerning government.

once. Returning later on in the day, plaintiff said as he had only taken delivery of three gosras he had called round for the fourth. Informed he had received all his dates, and would get no more, he proceeded to make a scene. A crowd gathered and took part in the wordy argument that ensued; Somals love a scene of this kind. Some wisecracks attempted to settle the matter by calling on the trader to swear a divorce oath that he had been paid for not more than four gosras of dates, and that he had delivered same. He took the oath, and the crowd declared the matter settled. Not so; there still remained the D.C., to whom complainant repaired with his plaint. Now a divorce oath is a bad one to swear falsely. The man taking it gives the name of one wife and her father, and if he lies or equivocates in the statement concerning which he has taken this oath he loses his wife. Evidence was taken that the man had sworn the divorce oath at his shop; that he had given the correct name of his wife when taking it (a man would not scruple to swear it falsely on the name of a woman who is not his wife). This ascertained, it was unnecessary to put him through the ordeal again. There was no evidence beyond the word of one man against the other as to the date transaction, so the D.C. addressed the two men. "The matter in dispute is one gosra of dates; do you"—to the complainant—"agree to split the difference between you, and accept half a gosra from the defendant?" "Certainly, Sahib," came the answer, without hesitation. "And are you"—to the defendant—"willing to do likewise, and pay half a gosra to this man in full settlement of his claim?" "No, Sahib; I can't afford to throw my property away like that; I want to fight the case, and will pay all or nothing." "Case Dismissed" said the D.C. A very subtle judgment, slightly above the heads of the audience in the court; but a wise and just one, in spite of that.

To return to the law of compensation, for one can never get away from it; I believe that the average poor man in Somaliland goes round hoping someone will give him what Tommy in France called a blighty one, so that he may claim for compensation. It would appear unfair to hold a man responsible for his brother's debts. A case came up in court

where a debtor had absconded to Abyssinia; the creditor claimed satisfaction from the man's brother, arguing very shrewdly that if the debtor were killed by another man his brother would claim his share of *día*, and was therefore responsible for his debts. "Something in it," I thought, "but one can use one's discretion about splitting straws of this kind." To my astonishment, the brother of the runaway accepted all responsibility, and gave security that the debts be paid.

It nearly always happens that when a defendant cannot be found plaintiff himself keeps watch until the former's relatives come to town, when he trots them up before the harassed D.C. to re-open his case. The Akil or Akils of the men are called in, and given instructions to see that the case is settled as the D.C. decides. A very careful record of such decisions is kept, and generally the day comes when they are obeyed; so that it is fair to assume that they give satisfaction. They are certainly just.

H. RAYNE.

NOTES ON THE TURKANA TRIBE OF BRITISH EAST AFRICA

PART I.

Origin.—Dr. Stuhlmann (*Handwerk und Industrie in Ost-Afrika*) distinguishes five strata in the composition of African natives. First, the dwarf original population, of which scattered remnants are seen in the Pigmies, Bushmen, and perhaps Andorobo; though it is an open question whether small men generally are a special race or degenerates of black races, and the latter is the view taken by Keith in the Hunterian Lectures of 1910. Second, Nigritian peoples, dark-skinned, woolly-haired, with isolating languages formed of monosyllabic roots with no accent, but pitch; their centre of dispersion being South Asia after the end of the tertiary and at the beginning of the pluvial period. Third, Proto-Hamites, probably from the North, speaking an agglutinous language with numerous classes of substantives; who by their admixture with Nigritians gave rise to the Bantu group.

Fourth, light-skinned Hamites coming in near Suez and across the Bab-el-Mandeb, spreading all over North Africa, who by mixture with the preceding elements gave rise to the Bisharin, Hadendoa, Bari, Latuka, Masai, and later to the Galla, Somali, Proto-Abyssinian, Watusi, and Bahima. Fifth, Semites, who; having mixed with Sumerians or Turanians in Arabia, migrated to Egypt circa 5000 B.C., and formed the cultural basis of Ancient Egypt.

Only the fifth and part of the fourth strata can be deemed historical; the first three during a huge period forming the "Negro." Nubia was originally inhabited by the Archaic Egyptians and it was not until the time of the pyramid-builders that the Nigritians came north from their first home in the region about the Great Lakes. Lower Nubia then

became the crucible for the formation of the new races; Sir Samuel Baker states that the Galla (Hamites) once extended far into the Latuka territory. The fusion having taken place, and the zebu-type of cattle having been introduced by the Hamitic element, the next division was doubtless that into agricultural and pastoral peoples; the pastoralists, by reason of their cattle, the forests and swamps, and the tse-tse fly, taking a south-eastern route. The more adventurous of these peoples pushing South met the Andorobo or hill-dwellers, possibly relics of the first African stratum, and with them formed the Suk, Chebleng, Elgeyo, Kamasia, Nandi, and Lumbwa tribes of to-day.

The Turkana are probably one of the latest formations, and their migration one of the most recent during this lengthy period; they are undoubtedly allied to the Masai, Bari, Latuka, Karamojo, Wami, Dabosa, Dodoso, Jie, and Teso peoples and to a less degree to the Dinka, Shilluk, Acholi, Aluro, Lango, and Kavirondo (Ja-Luo) group; while they are to-day, with the Karomojo, transforming the Suk from an aggregation of hill-dwelling hunters practising a little agriculture into a pastoral tribe. The rapidity with which pastoralists like the Turkana, Somali and Masai absorb, or endeavour to absorb, other tribes and grazing to-day, despite European interference, leads one to think that their migrations have not been so age-long, and in many cases are aided by the people to be absorbed welcoming the oncoming "cattle-culture" and increased wealth.

It is possible that the great Shilluk movement of two hundred years ago hastened the movement of the Turkana, amongst other tribes, and the Turkana think their own migration recent. Native accounts collected by Mr. S. O. V. Hodge are to the effect that the Turkana are an off-shoot of the Jie, a tribe administered from Uganda and living on the escarpment north of Mount Moroto, and that the first settlements of the new tribe were near Lokiriana and Naiyeche, and that in a short time the whole of the Tarash Valley was occupied (*vide* African Society's JOURNAL, Vol. XVIII., p. 183 for map). The Turkana and Jie languages are to all intents one, and the Turkana in all their raids have respected the Jie, while the Jie have reciprocated by providing them

with spears and other iron implements, obtained from the Acholi, at advantageous rates.

The origin of the word Turkana is stated to have been *Ny'turkwan*, caves in rocks, in which the Turkana first lived. The Turkana do not exhibit any physical resemblance to cave-dwellers. While not being "giants," as reported, they are as a race extremely tall. The word may mean "dwellers in stony places" when the nature of this country is considered, but it should be noted that the rocks and crannies abounding in Turkana do often offer shelter, and further, that the reputed parent-stock, the Jie, live on the table-land at the edge of a precipitous escarpment, in which there are natural caves. Possibly a comparison of the Latuka language with the Turkana will support a suggestion that Latuka (more correctly *Eltuken*), the spelling of Sir Samuel Baker and Emin Pasha, and Turkana are the same, or variants of the same, word.

Tribal History.—Shortly after the formation of the tribe it came into conflict with its neighbours, first with the Dabosa, who were occupying Lojom, on the Lower Tarash (the fighting has continued and the Turkana have a respect for the Dabosa); next with the Donyiro, a tribe partly in the Sudan, Uganda and East Africa Protectorates, akin to the Dabosa with a language approximating Turkana, and with the Marle,¹ the majority of whom live in Abyssinian territory between Lakes Rudolf and Stephanie, whom Count Teleki characterises as a "remarkable people held in great esteem by surrounding tribes." The fighting took place in the neighbourhood of Mounts Pelegech and Labur; relations are now friendly in the North of Turkana. At the same time the Turkana were spreading in a south-eastern direction and met the Samburu,²

¹ Marle, there is a Suk legend that they are descendants of Suk from Maerich whom famine drove North. Natives state their language approximates to Masai and Nandi. Count Teleki (1883) notes that they do not circumcise; they cicatrise the body as the Turkana, Karamojo and Suk, and use the wrist knife as those tribes.

² The Samburu, presumably the Burkeneji noted by Teleki in 1888; in May that year he states the *second* heavy Turkana raid took place. Mr. Beech, *The Suk*, relates that some of the Samburu fled South of Lake Baringo, where they became the Njempe or Njamusi. They are of Masai origin. Probably the Turkana obtained camels, which they prize, from the Samburu and the markedly Hamitic Rendile.

a relic of the Masai migration, who possessed the country between the Turkwel and the Kerio Rivers as far north as Lake Rudolf and as far south as Laterok Mount. The Samburu were defeated and fled in the direction of the El Barta plains, Mount Marsabit, and the Guaso Nyiro River, where they are still to be found. Having defeated the Samburu the next tribe met were the recently formed Suk.⁸ Relations were at first friendly, later inter-tribal raiding began, which continues to this day. The Suk were driven from the Muruasagar Hills to the Chemerongi Range, which they hold with difficulty. Another tribe with whom the Turkana came into conflict are the Karamojo, with whom they seem to have been ever inveterate enemies, and to have contended equally. They did not come in contact with the Masai until both tribes were administered.

Distribution.—The boundaries of the area occupied by the Turkana have not been defined for the purposes of administration. A natural and tribal boundary would be from Sillali along the foot-hills westward to Kolosia, to the Turkwel Gorge, thence along the foothills of the Chemerongi Range, thence along the northern slopes of Mount Moroto, thence along the escarpment to Mount Zulia, thence to the present Sudan boundary, thence in a north-eastern direction to encircle the Lorusia Mountains, to the Abyssinian frontier; this boundary does not provide an eastern limit to the tribe and the Turkana are encroaching upon the Samburu in this direction.

The population of Turkana is probably about 45,000; roughly 25 per cent. are thought to inhabit Sudan territory, 50 per cent. Uganda territory west of the boundary with Kenya Colony, 25 per cent. between the Turkwel and Kerio Rivers.

Comparison with Other Tribes.—The group or groups with which the Turkana are affiliated have been noted in speaking of their origin. The tribes having a special relationship with the Turkana are the Jie, Dodoso, Karamojo, and Suk.

⁸ Suk, said to be a Masai word *chok*, a short bill-hook used in agriculture by this and other Escarpment Tribes. In the same fashion the Masai nicknamed the Kipsikis, *Lumbwa*. The Suk call themselves Pokwot, plural Pochon.

As regards the Jie, the relationship is fiduciary, there is a physical likeness, the languages present only dialectical differences, the nature of their country makes the Jie somewhat agricultural and the Turkana almost entirely pastoral.

The Dodoso, the same remarks apply, save that there is enmity between them and the Turkana. The Karamojo are not good friends with the Turkana, the language is alike but not so much as with the preceding two tribes, the physical resemblance is not so great. It will probably be found that the Karomojo are of two types; the first the Niloto-Hamitic type, tall, long-legged, often with Hamitic features preponderating in influence, customs, and numbers over the second type of a Bantu strain, found more especially north and east of Mounts Elgon and Debasien. The Bantu type in the Karamojo has been noted by anthropometric measurements by Dr. Shrubshall (*vide* Sir H. Johnston, *The Uganda Protectorate*, Vol. II., p. 762).

The birth, marriage, inheritance, and death customs of the Jie, Dodoso, Karamojo and Turkana are very much the same, and even the clans, cattle brands, and names. The weapons, head-dress, stools, dress,⁴ and ornaments present a like similarity, as also the food and its preparation; the first three tribes, however, while obviously preferring a cattle-food existence and inhabiting a country more favourable than the Turkana, do a little agriculture. Probably the original nucleus was that known as the Jie, Dodoso, and Turkana tribes to-day, then living above the escarpment north of Mount Moroto, the first party breaking off and going directly south to form the Karamojo with indigenous natives and a Bantu people, the second party to form the Turkana and remaining pure.

There are differences in the form of hut-building,⁵ the more sedentary Jie, Dodoso and Karamojo following one type; the

⁴ Dress, Sir H. Johnston, *The Uganda Protectorate*, Vol. II., shows several photographs of adult female Karamojo naked. They are well clothed to-day not in trade goods but in skins, and never seem to have been otherwise. His book is dated 1902.

⁵ Hut building, the same writer, p. 772, states the Karamojo are perhaps an exception to the rule of the "flounced" Nilotic thatching of huts. No exceptions amongst them have been seen in their permanent villages, and such Turkana as have permanent dwellings follow the same pattern.

extremely nomadic Turkana naturally another, nomadic only from the nature of their country.

A comparison with the Suk presents other features, and possibly a key to the formation of the Nandi, *i.e.*, the confluence of Niloto-Hamitic natives with Andorobo or Hillmen, an amalgamation dictated not only by conquest, but by admiration for the virile qualities of the immigrant and for his cattle, offering by their possession wealth, food, drink, clothing and a "culture."

In early days the Suk, if then possessing any cattle, were debarred by the Samburu from grazing the plains in the Kerio Valley area, and their first impetus towards a nomadic life was on the first successful raid upon the Samburu; having obtained stock they naturally came in contact with the oncoming Niloto-Hamitic, Turkana, and it seems that they amalgamated with them to some extent about 1860, afterwards quarrels set in.

The fact remains that an increasing number of Suk are adopting a pastoral life modelled on the Turkana, marrying Turkana women in the East and Karamojo women in the West, following the Turkana dress, weapons, customs, nomenclature, organisation, and even amongst the pastoral sections abandoning circumcision, particularly in the West, and endeavouring as much as possible to speak Turkana or Karamojo, a language very different from the Suk tongue, which is roughly an archaic form of Nandi, and which they now affect to despise.

Physical.—The Turkana have been described as "giants," and their average height estimated as 7 ft. They are certainly a tall race, but not giants, and a man of 7 ft. in height would be exceptional. They are a well-made race, and capable of great exertion. The colour of their skin varies between chocolate-brown and black. The hair of the head is negrolite. In their physiognomy they do not present so prognathous a type as the Karamojo, some faces are Hamitic, as with the Somali. Turkana women are prolific and well-made, but while a tall race of women they do not reach the height of their men.

The Turkana, as the Jie, Dodoso, and Karamojo do not circumcise or practise clitoridectomy as the Suk.

Clothing, Ornaments and Weapons.—The body is disfigured by Turkana men by cicatrisation on the chest and shoulders; on the left breast when a woman has been killed by him, on the right or the whole chest when a man, and—*moi* (from Turkana *emoit*, an enemy) is added to his name, the cicatrisation is done by cutting. The septum of the nose is pierced by men and a white metal plaque hung, a custom probably causing the Masai name *El-Gume* for the tribe; the middle incisors of the lower jaw are usually extracted; the lower lip is pierced and a piece of polished quartz or metal inserted. The dressing of the hair is varied, it may consist of a few ostrich plumes; a black ostrich feather busby; a carefully mudded skull cap in which are inserted in gut sockets, "antennæ" of wire or oryx horn, bound with giraffe hair, with a chain hanging down the back and tufted with marabout-down; or a striking oval chignon stretching far down the back made of the hair of the wearer, his relations and friends, and mudded, with ostrich feather and "antennæ" decoration. There is nothing to show that the hair used is of a man's ancestors; the feathers are often dyed delicate shades of blue and pink. The chignon is more associated with middle age. The ears are pierced for rings. All these physical decorations are found amongst the Jie, Dodoso, Karamojo and Suk.

The ordinary dress of a Turkana man is an oval goat-skin pad down the back, a string of beads or else a belt of hard seeds around the waist, a pennon-shaped apron over the buttocks, a number of iron rings or beads around the neck and wrists, skin garters at the knee and ankles, thumb and finger rings. Giraffe or other tails worn in a band around the biceps are favoured by young men, an oryx horn snuff-box is carried, and one of the three distinct types of pillow-stools. Sandals of thick hide are worn, a piece of fat is hung to the neck ornaments to be used for oiling the body and cleansing the weapons. The same are found amongst the Jie, Dodoso, Karamojo and Suk.

The Turkana weapons are two spears of about 10 ft. in length, with laurel-shaped heads, wooden hafts, and iron shod; these are used for stabbing and throwing; they can be

thrown 70 yards, and in times of peace are sheathed with strips of leather around the blade; a curious circular wrist knife used at close quarters, also sheathed; a curved stick with a sharpened end used on the head of an opponent and as a shield; and a finger-ring knife, used, it is said, as a knuckle-duster, but more generally for eating purposes. The shield is a narrow strip of elephant or like hide, sometimes of wicker, with a stick hand-guard, which protrudes at the ends, decorated with a black pompom of ostrich feathers. They do not use the bow as the Suk, but otherwise resemble them, the Jie, Dodoso, and Karamojo, in their weapons.

The face is often muddled, grey, white (ash), and yellow, as the legs below the knee; a pattern of white and red ash and mud sometimes decorates the fore-locks; the temples are shaved and the hair of the body removed; this ornamentation is found amongst the other tribes mentioned.

Turkana women generally shave the sides of the head, twining the hair of the pate in thin plaits; the ears are pierced for rings; the neck is adorned with a mass of cowries and beads, necklaces of ostrich eggshell are prized; the waist is girdled with a thick belt of beads; a V-shaped skin apron decorated with beads is worn over the pudenda, and a skirt of skins with jagged ornamented edges, longer in the married woman; the wrists and fingers are decorated with iron rings. They oil the body with rancid butter.

Houses and Villages.—These are of a mean description; the hut consists of two parts, and is a small framework of sticks about 4 ft. high, over which skins or grass are spread.

This is the sleeping place. There is often another shelter of roughly interwoven branches which is used as a sitting place and kitchen. Each woman has a separate hut. The youths sleep in the open on ox-hides. This rough hut is dictated by the extremely nomadic nature of the Turkana, in its turn dictated by the nature of their country and the numbers of their stock; where they have settled for any time they build their huts in the "flounced" Nilotic fashion.

Stock is kept in the open, save the newly-born. Thorn zaribas surround the villages. The villages are often large, for safety in the case of raids, and division of labour in the

herding of stock, each kind and age of which has its particular grass for grazing. The work entailed by large herds of stock is little realised by Europeans. There is no particular system in the congregation of villages, save the reasons noted above; they are generally inhabited by members of the same section, and are a law to themselves.

JUXON BARTON.

(To be continued.)

NATIVE SONGS FROM NYASALAND¹

It was with great pleasure I accepted your invitation to give a lecture this evening, and I feel it an honour to do so among you who are so learned in things African.

Long ago I remember reading, with much interest, Sir Harry Johnston's wonderful book on British Central Africa, and you will know that it was greatly owing to the wisdom and tact of your President that treaties were successfully arranged with the slave raiders, whose persistent and warlike operations were a constant trouble in that little corner of the world. And when a British Protectorate was afterwards proclaimed, the first Commissioner appointed was Sir Harry Johnston. So you will know all about the geography and history of Nyasaland.

But in bringing the subject of her music before you, I hope it will reveal a new interest, and I should like to say that I have written the music exactly as it is, untouched by European influence, and before degeneration had set in, as it has in the case of the negro music of America. In some of the settings I have tried to suggest the complex atmosphere of the quickly changing emotions. Anyone who has heard a native telling stories to his companions round a camp fire at night will know of the subtleties of expression and change of voice that he puts in, and the 'cute way he portrays each character in the yarn he is telling. And so it is in his music; and I suppose because it rings true to life it accounts for the occasional strange kinship to our modern musical thought.

Most of the music which we are to consider comes from Nyasaland, a land of lakes and mountains in the highlands of Africa, but some of it is from the sandy, tropical rivers flowing from the heart of the continent.

¹ This paper was read at a meeting of the Society held on December 9th 1920. For report of other proceedings on this occasion, see page 140.

Nyasaland is called the "Cinderella" Protectorate by those who love her and believe that a fair future lies before her, but is more familiar to home communities as the land of Livingstone.

I should like you to understand that this music was sung or played by the various native tribes entirely for their own ceremonies, enjoyment, or amusement—never for European ears.

There are certain melodies sung when travelling, known to those who are observant of such things, but the average person travelling, or even living, in Nyasaland is unaware of the extent of native music and of the very large part that music takes in the native life. Whether in highlands or lowlands, of warlike or pastoral habits, the natives are very shy of singing their choruses except among themselves, and quickly hush when it is known a stranger is approaching.

During my first year in Africa I was often travelling up and down the Zambezi River, and was then able to study the boat songs. At that stage I could not understand their meaning, but later found it fascinating to follow the lilt of the *words* also. At the end of a year I left the Zambezi River, and my home for sixteen years was among the mountains further north.

As time went on the natives around gradually gave me their confidence, and dusky visitors came often, bringing presents of sheep, beadwork, or skins from various parts of the country. At certain seasons of the year I occasionally visited other parts of the mountains, or went to Lake Nyasa, and thus was brought into touch with a variety of native life. I must confess that primarily my interest was among the women, and *their* customs and thoughts, and being a keen musician I gradually formed a collection of their songs. Looking back, I can see I could not have chosen a better way to gain the confidence of the menfolk and thus learn their music also. But it was a long labour, and at times discouraging—I have waited three, or even five, years for one song or chorus.

More than once, however, apparently in recognition of some slight service I had rendered to wife or child, a man would tell me of certain dances or war songs sung in his

village, and knowing I had what to him seemed a mad craze in that direction, somehow persuaded his friends to let me hear them.

On two occasions a little party of ten or twelve men even came to my garden, and sitting on the grass under the trees, sang their short *répertoire* to me, accompanied, native fashion, by a combination of sounds, crude enough, but, truth to tell, very effective with the voices.

In such a native orchestra there is

First, a stringed instrument, something like a small lute, which has three strings and is plucked by the fingers.

Second, there are metal rattles to be shaken, giving tinkling sounds.

Third, rattles made of gourds, bringing in (shall we say?) the wood-wind!

Fourth, the tapping of small sticks on a large hollow bamboo (suggesting perhaps the xylophone).

Fifth, the rhythmic clapping of hands.

And last, as a good foundation for all, drums, large and small.

These little performances were given on the distinct understanding that there should be no stranger present, and also that native women should not be allowed near. I suppose they felt it a little beneath their dignity to be seen entertaining a woman, even if she *were* white, but whatever the reason, the conditions were faithfully kept.

Before a more detailed account of the actual songs, I should like to convey something of the atmosphere of their surroundings, and ask you to imagine the care-free, open-air life of the primitive people who live there, and you will understand their natural effort to find expression of their emotions in music, crude though it may be.

The Rev. Dr. Norman McLean, who visited the country some few years ago on behalf of the Church of Scotland, and contributed a series of articles to the *Scotsman*, in one of them wrote: "It is strange to think how this great Lake of Nyasa lay here in the heart of Africa, with villages scattered thickly on its shores, and canoes gliding on its waters, and the wooded hills along its sides, and the glory of sky and

cloud, sunrise and sunset, glowing on its bosom as on a polished mirror, while the centuries rolled and knew not even of its existence. As one sails out into the lake's deep and wide spaces, one forgets that it is an inland lake—it seemeth as the sea. And there are ramparts of hills along its sides, and here and there valleys and dells opening among them. Its vastness appeals to the imagination; there is a haunting flush of loveliness on the face of Lake Nyasa."

* * * * *

It is rare in these enlightened days to come across music, untouched by softening and civilising influences—its rugged and melodic outline preserved—and from an historical point of view you will regret with me that it is so rapidly disappearing. In the last ten years I have often heard the younger natives singing, or rather murdering, good old English hymns and tunes, and the children are ignorant of the wild music of their fathers.

And now as to the circumstances of our first illustration, a very simple song sung by the Chikunda tribe, and written twenty years ago while on a little river flowing north from the sandy reaches of the Zambezi, within a short journey of the sacred spot where, by the river bank, Mrs. Livingstone was buried.

A lovely glimpse of silvery water between mountains covered with primeval forest, grassy plains, a *barge*, dignified by the name of houseboat, intense heat, slow, lazy travelling—these all make up the journey. On each side of the deck of the barge stand eight brown figures, their supple, well-built bodies showing to perfection under the bright light of a tropical sky.

Each holds a long pole for punting, and their only clothing is of leopard or other skins, fastened around their loins. They make a picturesque group, with their silhouettes clear-cut against the sky. Were it not for their singing and slow, rhythmical movements, one could almost imagine them to be Greek statuary, so graceful and full of suggested strength is their wonderful poise. They sing in antiphonal fashion—first one side, then the other taking up the refrain.

The barge goes lazily on with the sixteen men punting

while singing their slow songs, the time varied to the movements of their poles.

I have written English words, thinking they would be more interesting to you.

1. Out from the waters deep
Arose a misty cloud.
The palm-tree sprang from sand; it rears its head.
The white bird sings.
2. Now on the silvery stream
The grasses nodding float.
The sand-bird builds her nest, her cry is heard.
The sun sleeps on.
3. Low in the West she goes,
The rocks are dark and cold.
The village fires rise high with red and gold.
The night-jar sings.

* * * * *

The women do not take part in native music, and there are two distinct classes of male voices among Nyasaland Bantu tribes:—the first of high pitch, somewhat similar to falsetto in quality, much admired by the natives, and always used for solo parts when available; and the second, which approximates to our baritone, but is of a very rough description, and is the voice of the majority of the men.

Some of their music is founded on the Pentatonic scale, but not all of it by any means.

Occasionally, but not often, certain notes were sung *slightly*, but definitely sharp or flat. These notes did not depend upon the idiosyncrasy of the singer, but belonged primarily to the song itself, and they were always sung in this manner though by different singers. In my manuscripts I have marked these specially inflected notes to indicate how they should be sung.

I have been surprised to discover among the natives their accurate sense of absolute pitch. It is natural to me, but I always carried a tuning fork as a check, and observed that the same songs and choruses sung on various occasions and by different people were practically unvarying in pitch, and in the spirit in which they were sung, though other words were often substituted.

The next illustration is from the Angoni, a race descended

from the Zulus, who, resenting the fierce rule of Chaka, went North and settled on the shores of Lake Nyasa, intermarrying with the people there.

These are two short songs sung by solo and chorus chiefly at dances during harvest time. The first is somewhat of nursery type about a little chicken with a little cry, but has a fascination of its own. You will notice the interweaving of the parts, and it is wonderful to watch the precision of the entries, remembering there are no conductors or trained singers there.

1. The little chicken ka-lira,
Oh! hear its grief and sorrow!
Cries softly,
Cries "Peep-peep!"
Oh! hear its grief and sorrow!
2. The little chicken ka-lira,
Flut-t'ring its wings and feathers:
Cries shrilly,
Pecks gently,
Oh! hear its grief and sorrow!

The second is a merry-hearted impudent song of mischievous boys calling one another, and stealing Indian maize from the fields in the absence of the owner.

Robbers! Come to gather in your neighbour's field!
Lightly! Quickly come and gather up his corn.
Stealing softly in among the golden grain,
Gather! Pluck the fruit and hasten on again.
Golden corn. See! It's ripe!
Quickly come and gather up your neighbour's grain.

* * * * *

Now we turn to the songs of the road. When native chiefs or Europeans wish to go a long distance, they are carried in a canvas hammock called a machilla, slung on strong bamboo poles, and the teams of natives who bear these poles on their shoulders frequently amuse and encourage one another along the road by means of these songs while carrying out their arduous labours. They can carry a machilla a distance of two hundred miles at the rate of twenty miles a day, camping by the roadside at night, and it is no uncommon thing for them to make a single journey on foot of from forty to fifty miles in one day while assisting in the bearing of a heavy machilla.

While being carried thus I have been enabled to write many of these songs, and when halting for a rest in the middle of the day during the great heat, the natives making a fire and cooking their food, I have often elicited interesting information about the songs they had been singing. Some of these songs are sung by Angoni, of whom I have already spoken, and others by Ajawa or Yao tribes.

In the next illustration, the first originated among the boys who had been captured and driven from their homes by slave raiders, and then forced to work in strange countries, where their hearts hungered for their homes and kinsfolk.

1. Our work now is bitter : grievous. Howa-Howa.
 Our work now is bitter : grievous. Howa-Howa.
 Our brothers are smitten.
 Our homes are forsaken : desolate.
 Our children are scattered : homeless. Howa-Howa.
2. Our brothers are starving : hungry;
 Our spirits are weary : hopeless.
 Our shoulders are heavy : broken.
 The day brings us sorrow and darkness.
 Our work is bitter.

The second of these road songs is in a happier strain—of contented, strong workers looking forward to a good meal when they had reached the end of a journey. I need hardly remind any of the audience who have experience of coloured labour, of the unconcealed delight of the natives at the prospect of a lucky shot at game, which will provide them with a welcome meal.

1. Come, my people—come for fresh meat.
 Come, my brothers—come and seek food.
 Come, my people—come to buy meat.
 Distant going—runs the wild buck,
 Horns upraised, and eyes a-glowing.
 Come and find him, quick we'll slay him.
2. 'Neath the thorn-tree, 'twixt the branches,
 Round a valley, cross the streamlet,
 Up the mountain now we track him,
 Speed the arrow! Hear its laughter!
 Spear the wild buck! On the rafters
 High we'll place his horns among us.

* * * * *

There are many of these travelling songs, but it is impossible in a lecture to give more than an "impression" of them.

There are also many "calls"—long-drawn whistles and other sounds used by the natives to communicate with one another, each having its own particular meaning, and I was interested in making notes of them when possible. Although living among the natives so many years, I have never been able to obtain direct information about these "calls," so well are they guarded. When questioned concerning them, the individual always pretended not to understand. So, apart from general knowledge gathered from overhearing or taking part in native conversations, it was only by keen observation over an extended period that I was gradually able to make out the definite communications intended by definite sounds.

Among these children of Nature the sense of rhythm is evoked with intensity, and they are brothers to the modern student, who with a keen ear for the finish of phrases and gradation of tone, concentrates chiefly on the *manner* of singing, and the regular recurring pulsations, but I am afraid you would be horrified to hear the rough quality of many of the voices. It is interesting to note that I have never come across a song which might be classed as analogous to the civilised so-called "love-song," and this perhaps indicates their attitude of mind. They are very fond of their children, and are generally kind to their fathers and mothers, but singing a love-song to a dusky fair one is—unheard of! We will now turn to a side which in so many countries is voiced in passionate song—that of mourning and lamentation.

The first song of the next illustration is monotonous by reason of its having only three notes, but it vibrates with a real passion when sung in its homeland. The singer is in trouble, and the words present, not the literal meaning, but the native picturesque way of describing his sensations. The allusions to his pipe and his smoke mean his nearest and dearest. His smoke is much to him.

This will be immediately followed by a two-part boat song, from the Elephant March on the River Shiré, and represents the villagers turning out of their huts to frighten away the large and fierce eagles they see flying overhead with evil intentions of carrying away any young birds or animals for their prey.

In the settings I have tried to convey that, although only three notes are sung in the first, it is sung in a varied manner and worked up to a certain climax, and also in the second to give the feeling of the gentle rocking movement with which the boat-song is sung. The first part of the former is accompanied by the deep sound of large drums, and later by *both* large and small. The words are—

1. Oh! my soul! Oh! my pipe! Troublous waters round me.
 Oh! the sunshine! Ah! my smoke! My brother now is starving.
 Alas! the moon. Alas! my pipe! You are in the forest.
 Ah! The starlight! Ah! my smoke! Here are thorns and briers
 Gathering round about me.
 In the thicket now I go—none is near to help me.
 In the clouds are fear and woe—down the depths I'm falling.
 Troublous waters round me, darkness round about me.
 Splashing! Splashing! Splashing! My very soul is torn.

“The approach of the Eagles.”

2. Presage of evil! Bringer of fear!
 Eagles of might are hov'ring near.
 Gather around the lambs and the sheep.
 Call the strong men to smite them.
 Pinions outspread as slowly he flies.
 Lizards glance up! The wee chick cries.
 Bring our your arrows! Throw your spears!
 Hasten! The strong men conquer.

In order to voice more passionately true mourning and lamentation, the art of drum-making is followed, and there is a system of tuning, rough and ready perhaps, but in skilled hands marvellously answering the purpose. This making of drums is prepared for many months beforehand. Likely trees are felled and cut into sections, some large, some small, all proportionate to their girth, ranging from a yard across down to four or five inches only. The inside of the section is burnt and cut out after the wood is considered seasoned; the animals are shot and their skins prepared and stretched. When the drum-makers start their work, assisted by many willing hands, they take the largest section and stretch the skins across the top of these pieces of hollowed trees, and fasten them round tightly with wooden pegs. Then they prepare the next largest in size, and so on until the smallest is completed, and the material is all used up. The drums

are then placed with the hollowed side downwards in a grass hut, and are left there some weeks "to settle."

At the end of that time, starting on a night with a full moon, the singers and musicians are called in by the village people, and there is a great gathering of happy people out to amuse themselves, something like an old English fair.

The chief musician is highly decorated on his person by clothing of various handsome furs, long imposing coloured feathers on his head-dress, and weird bead-work and charms on his limbs, and he is generally highly skilled in his own particular way. It is his duty, with his assistants, to test each of the drums, a lengthy process, as there are often a hundred or even more. Some prove unsuitable; the tone is not resonant, or the wood is insufficiently seasoned and has split. The smallest drums are tested first, and great is the satisfaction of the onlookers when their excitement is worked up to the ceremony of testing the larger ones, and a particularly fine drum is passed as "quite good." The chief musician tests them all, even the very smallest, for they each have a use in the scheme.

From the good ones, however, there is a further and most critical selection, and this is how it is made. The singers sing their songs belonging to the village repertoire, and as they are singing, the musician gently taps a drum, and decides if in his opinion the sound of the drum goes with or clashes against the song, and it is chosen or rejected accordingly. Thus their tuning, and the results, are often most effective, and not to be lightly condemned by more learned folk.

These discarded drums, good, but not suitable for their particular songs, are sold among their friends in neighbouring villages, who carry out a similar process of selection, and it is considered a great honour among the native chiefs to be presented with an approved drum.

The following song is without drums. It has both melody and rhythm, and is sung during the final ceremonies of mourning among some mountain races. On the night of a full moon the chief singer stands on the top of a hill, and with hands raised to direct the sounds from his mouth across the

valley below he sings the "Lament," with high voice and declamatory manner, while at the foot of the mountain hundreds of villagers sit huddled among the trees to sing a refrain between the sentences of the Lament. You will notice this refrain has a harmonic basis, and is really a series of broken chords.

1. There death now has come to the homestead,
Enter not, my brother.
Ho-ya-ho-ya-ho.
A maiden, alas, there is sleeping.
Ho-ya-ho-ya-ho.
2. Her rest is dark and unending.
She returns no more.
Ho-ya-ho-ya-ho.
Her spirit has passed on a journey.
Ho-ya-ho-ya-ho.

* * * * *

The last is a splendid War Song, accompanied by small drums, the brandishing of spears and movements of the body meaning courage and defiance.

1. Fight now! Come and fight now!
Slay them! We'll brandish spears!
Straight forth doth speed your arrow.
Tremble! Yes! *They* tremble!
When *we* draw near,
And *far* they'll flee as we approach them!
2. Sharpen keen your arrows!
Brave heads upraised and shouting
Loudly our defiance.
All there who oppose us
Quickly our spears
Shall pierce their breasts. They will be scattered.

This last illustration brings our lecture to a close. Naturally in this short time I have only been able to reproduce, or perhaps suggest, a slight atmosphere of the original, but I hope these little glimpses may have roused some interest in the music of a far-away people.

ELLA KIDNEY.

SHORT NOTES ON THE SYLLABIC WRITING OF THE EYĀP—CENTRAL CAMEROONS

PREFATORY NOTE.

THE Eyap language of the Bagam (Ba-yam) town and district is the Pa'am of Koelle's *Polyglotta Africana*, numbered 230 j in my *Comparative Study of the Bantu and Semi-Bantu Languages*. It is a semi-Bantu language or dialect of the Mbudikum-Bamum cluster (230) and the Group A (S-B) of the Cameroons—Cross River borderland.

The author of these notes was good enough to append to them reproductions, several hundred in number, of the signs and conjunctions of signs used in this arbitrary syllabic writing. But the cost of reproducing these would be too heavy for the finances of the JOURNAL. It is quite sufficient to say that they are, most of them, imitations or perversions of Roman capitals or else of the trade marks stencilled on the goods of European traders. A few are ideograms.

The resemblances with the Vai alphabet are considerable, but purely accidental, both alphabets being copied from the white man's symbols.

H. H. JOHNSTON.

THE following notes were collected during the latter part of 1917, while I was stationed at the town of Bayam, in the Cameroons Hinterland. This town is the headquarters of the Eyap tribe, which numbers less than ten thousand souls, all told. In the limited time at my disposal I was able to

collect a certain amount of information of ethnological interest, details of which I propose to publish in due course. It was while pursuing these investigations that I ascertained that some of the Eyāp were acquainted with a form of syllabic writing. It has long been known that in the neighbouring town of Bamum an elaborate form of this peculiar writing was in use, so I asked the chief of Bayam to let me have some specimens of the writing as used in his town. He said that there was some difference between the two forms, and this can easily be seen when comparing them. The Bamum form is well known in Bagam, or Bayam, but more particularly near the Nun River. The retainer who supplied me with the writing said that the Bamum form was used as the basis of that in Bagam, and that when the latter breaks down signs are borrowed from that of the former.

The Bamum form of syllabic writing has been described by several writers.^{11,12} It is said that it was invented by the present chief, Ndzoza, who conceived the idea after seeing some Arabic script when he was a boy. With the assistance of his attendant he has elaborated a system in which there are over three hundred and fifty signs. I was informed by several of the Bamum people who passed through Bagam that this writing was still being used in the town schools.

According to McGregor, who quotes from Mansfield, a form of syllabic writing exists among the Eksi people, who have their habitat to the north-east of Calabar, both in the Cameroons and in Nigeria.

In Liberia the syllabic writing of the Vai people has been illustrated by Johnston,¹⁶ who also quotes Forbes and Koelle.¹⁷ It is also mentioned by Migeod,¹⁸ and Momolu Massaquoi.¹⁹ In a note to Migeod's paper the editor of the JOURNAL states that "Mr. Migeod suggests that, as Vai men frequently travel to Kamerun, Njoya may have got the idea of writing from them." If the characters of the Vai and Bagam forms be compared it will be seen that there is some resemblance between them.

Yet another form of syllabic writing exists on the West Coast. This has been described by Talbot,¹³ McGregor,¹⁵ and Dayrell.¹⁴ The former writer, who describes the Nsibidi

writing of the Efiks in Calabar, says that it is not in general use because it refers to certain things, and "that no self-respecting Efik will confess that he knows anything about the writing of it." There seems to be no apparent connection of the Nsibidi either with the Cameroons or Liberian forms of syllabic writing.

LITERATURE.

In the publications of the Basel Mission several references are made to the Bamum form of writing.

L. W. G. MALCOLM.

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- ³ Göhring, M. *Sämtliche Zeichen der vom König Njoya von Bamum erfundenen Schrift.*, 1907. Basel.
- ⁴ — Der König von Bamum und seine Schrift. *Ev. Heidenbote*, 1907, Bd. 80, No. 6, 41-42.
- ⁵ — Die Bamum Schrift. *Ibid.*, 83-86.
- ⁶ König von Bamum und seine Silbenschrift, *Der. Mitt. d. Geogr. Ges.*, Bd., 25, 68 Jena.
- ⁷ Meinhof, C. Zur Entstehung der Schrift. *Zeit. für ägypt. und Altertumsk.*, 1907.
- ⁸ Oehler, A. *Der Negerkönig Ndschoya.* 1913. Basel.
- ⁹ Lempp, E. Der König von Bamum und seine Schrift. *Ev. Heidenbote*, Juni, 1907, No. 6.
- ¹⁰ Struck, B., König Ndschoya von Bamum als Topograph. *Globus*, 1908 Bd. 14, 206.
- ¹¹ Vollbehr, E. *Mit Pinsel und Palette durch Kamerun.* 1912. Leipzig.
- ¹² Mansfeld, A. *Urwald-Dokumente.* 1908. Berlin.
- ¹³ Talbot, P. A. *In the Shadow of the Bush.* 1912.
- ¹⁴ Dayrell, Elphinstone.—Further Notes on 'Nsibidi signs, with their meanings, from the Ikem District, S. Nigeria. *Journ. Roy. Anthropol. Inst.*, 1911, 521.
- ¹⁵ McGregor, J. K. Some Notes on 'Nsibidi. *Journ. Roy. Anthropol. Inst.*, 1909, 209-219.
- ¹⁶ Johnston, H. H. (Sir). *Liberia.* Vol. 2.
- ¹⁷ Koelle, Revd. Sigismund. *Vai Grammar.* 1848 (New Edition 1902).
- ¹⁸ Migeod, F. W. H. The Syllabic Writing of the Vai People. *Journ. Afr. Soc.*, 1909, Vol. IX., No. XXXIII., 46-58.
- ¹⁹ Momolu Massaquoi. The Vai People and their syllabic Writing. *Ibid.*, 1911, Vol. X. No. XL., p. 459.

ANNUAL GENERAL MEETING

THE Annual General Meeting of the African Society was held at the Imperial Institute, South Kensington, on Thursday, December 9th, 1920, at 3 p.m. Sir Harry Johnston, G.C.M.G., K.C.B., the retiring President, was in the chair, and amongst those present were :—

Mr. J. W. Allen, Earl Buxton, G.C.M.G., Sir T. Fowell Buxton, Bart., Sir Howard d'Egville, K.B.E., Mr. J. Withers Gill, Major C. S. Goldman, Sir Robert Hamilton, Capt. L. W. G. Malcolm, Mr. G. W. Neville, Mr. L. N. Peregrine, Sir E. Denison Ross, C.I.E., Prof. E. H. L. Schwarz, Capt. Frederic Shelford, M.Inst.C.E., Miss B. E. Vertue, Mr. H. S. Wellcome, Sir Reginald Wingate, G.C.B., G.C.V.O.

The Chairman, reporting on the election of President by the Council, said :—

It is with unusual gratification that we have induced Lord Buxton to succeed me as President of the African Society. He has, as you know, only just returned from Africa, and is still feeling the change of climate, but he is here with us to-day willing to take up his duties. It gives me great satisfaction to report this because it is a guarantee for the continued welfare of the Society, and proves that interest is shown in it by people who really know what Africa is. I have also to report the nomination of Vice-Presidents and Council according to the printed list you have in front of you. (These nominations were subsequently put to the meeting and carried unanimously.) Continuing, *Sir Harry* said : I would like to say a word in conclusion of the retirement from the post of Hon. Treasurer of Mr. A. H. Loring. He has held that office a long time, but he is now obliged by failing health to resign it. Mr. J. W. Allen has kindly agreed to take his place.

The Chairman then read the Annual Report, as follows :—

ANNUAL REPORT.

The Council have much pleasure in presenting to the Members their Annual Report.

Eight meetings have been held by the Council during the year. Sixty-six Members have been elected during the year, including three Life Members.

THE AFRICAN SOCIETY.

Dr. *INCOME & EXPENDITURE ACCOUNT for the Year ended 31st December, 1919.* Cr.

EXPENDITURE.		INCOME.	
To Cost of JOURNAL, Printing, Publishing, &c.	£424 6 9	By SUBSCRIPTIONS :-	
" EXPENSES OF MEETINGS	14 10 4	Subscriptions and Donations for the year	
" MANAGEMENT EXPENSES :-		1918	£619 6 0
Salaries	£322 13 6	Arrears paid up	35 6 8
Rent	50 0 0	" SALES OF JOURNAL	£654 12 8
Lighting, Heating and Cleaning	14 5 10	" ADVERTISEMENTS IN JOURNAL	50 16 2
Printing and Stationery	27 3 1	" INTEREST ON INVESTMENTS	60 4 6
Postages, Telegrams and Telephone	21 19 1	" BALANCE, being excess of Expenditure for	32 13 4
Sundry Small Expenses	37 4 0	the year	119 9 11
" AMOUNT WRITTEN OFF FURNITURE	473 5 6		
	5 14 0		
	£917 16 7		£917 16 7

BALANCE SHEET, 31st December, 1919.

LIABILITIES AND CAPITAL.		ASSETS.	
To SUBSCRIPTIONS PAID IN ADVANCE	£12 12 0	By CASH IN HAND	£15 17 7
" SUNDREY CREDITORS	2 7 9	" INVESTMENTS AT COST :—	
" CAPITAL :—		£1,129 8s. 10d. India 3½ % Stock	£1,100 0 0
Balance at 31st December, 1918	1,136 14 10	(Market Price at 31st Dec., 1919, £680 9s. 9d.)	
Deduct—Excess of Expenditure over Income		£100 War Loan—5 % 1908/17	95 0 0
for the year ended 31st December, 1919	119 9 11	(Market Price at 31st Dec. 1919, £91 10s. 0d.)	
		" SUNDREY DEBITORS :—	1,195 0 0
		For Sales of Journal	46 16 8
		For Advertising in Journal	34 5 0
" BALANCE DUE BANK on Current Account		" FURNITURE AS PER LAST STATEMENT	17 2 4
		Less: One-tenth of £57 written off	5 14 0
			11 8 4
			£1,303 7 7

Examined and found correct,

(Signed)

DELOITTE, PLENDER, GRIFFITHS & CO., Chartered Accountants
5, LONDON WALL BUILDINGS, E.C.

Hon. Auditors.

GEO. W. NEVILLE,

Acting Hon. Treasurer.

20th May, 1920.

24 350
24 350

At all these meetings the President, Sir Harry Johnston, has presided and taken an active share in directing the affairs of the Society at a somewhat critical period of its existence. The Council would like to pay their tribute to the unfailing energy, conspicuous ability, and sympathetic interest which their President has taken in all the affairs of the Society throughout the year, and the hope that his great knowledge of the African Continent will still be available for many years as joint editor of the JOURNAL.

Dinners and Meetings.

The Society has been particularly active during the past year in organising meetings, etc. A Dinner was held on April 28th, 1920, when Sir Harry Johnston, the President, delivered his Presidential Address, entitled "The Mammalian Fauna of Africa," accompanied by excellent lantern illustrations. A largely attended Luncheon-Meeting was held on February 5th, 1920, at which Captain F. Shelford gave an address on "Transport in Africa by Road, Rail, Air, and Water," at which the President, Sir Harry Johnston, presided. A new departure was made by the holding of several afternoon meetings, at which tea was provided, without charge. Two of these meetings (held in the Imperial Institute), on May 28th and June 29th, 1920, proved very attractive. The former was addressed by Prof. J. E. Duerden on "Ostrich Farming in South Africa," and the latter by Prof. E. H. L. Schwarz on "The Kalahari and its Possibilities." Miss Alice Werner read a paper on "The Native Tribes of British East Africa" on March 26th, 1920, at King's College, and the Rev. Edwin W. Smith gave an interesting address on "Native Customs of the Ba-ila of Northern Rhodesia" on October 29th, 1920, also at King's College. At all these meetings Sir Harry Johnston presided, and lantern slides were exhibited.

It has been found that the organisation of the Dinners of the Society has resulted in a loss to the funds of the Society, and that unless there was a considerable rise in the price of tickets the Council did not feel it could continue to hold the Dinners.

Journal of the Society.

The Council and Publication Committee have reason to congratulate themselves on having been able to publish many papers of scientific value and interest during the year. Amongst these may be mentioned the following :—" African Bush and Forest," by Major Cuthbert Christy, M.B.; " Manganese Ore on the Gold Coast, by S. H. Ford; " Reconstruction in Central Africa," by " Africanus "; " Further Thoughts on a Central African Confederation," by " Africanus "; " Land Tenure among the Bantu Wanyika of East Africa," by Sir Robert W. Hamilton; " The Kishashi (Ki-šasi) Language," by Sir Harry Johnston; " Tribal Mixture on the Gold Coast," by F. W. H. Migeod; " Great Britain in West Africa," by Rev. W. A. Crabtree; " Language Research: a Forward Movement," by Rev. J. R. L. Kingon; " Somali Songs and Little Texts," by Enrico Cerulli; " The Future *Rôle* of Tenerife," by Alex. Johnston; " Notes on Certain Substitutes used by the Germans in the Cameroon Campaign," by Captain L. W. G. Malcolm; " Who were the Manes?" by Northcote W. Thomas; " Some English Words in Fulani and Hausa," by Captain F. W. Taylor; " The Bantu in Madagascar," by Rev. Emil Birkeli; " The African Native Medical Corps," by Major G. J. Keane; " Africa and the League of Nations," by " Africanus "; " The Gã Homowo Festival," by A. B. Quartey-Papafio.

There has been a large increase in the sale of JOURNALS during the year, and two of the big shipping lines (the Elder Dempster and the Union Castle Lines) have arranged to subscribe to the JOURNAL for placing on their passenger boats sailing to and from Africa.

Financial Position of the Society.

It is necessary to remind Members in this as in other Reports of the past few years of the difficulties experienced by scientific and other kindred societies at the present time, owing to the greatly increased cost of printing, etc., and the Council reluctantly feel that it will be necessary to raise the subscription from one guinea to one and a half guineas to

meet the increased expenditure. The Council feel confident that Members will willingly fall in with this decision when it is realised that the future continuance of the Society on its present lines depends largely on this measure being adopted by Members as a whole. The importance of a scientific society for the study of African questions cannot be too strongly emphasised, more especially in view of the increased sphere of British activities in Africa.

Though interest in the work of the Society has not decreased during the past year, the Council feel that the Membership must be largely increased in order to enable it to continue its work, and an endeavour was made to this end by inserting a Memorandum in the July, 1920, issue of the JOURNAL, urging Members to obtain new recruits.

The Society moved its quarters during the year from 64, Victoria Street, to the Imperial Institute, owing to the lease of the premises in Victoria Street having expired. Accommodation being very difficult to find at the present time, the Director of the Imperial Institute kindly offered temporary quarters at the Imperial Institute, which offer was accepted by the Council.

Medal of the African Society.

Through the kindness of Mr. H. S. Wellcome (a member of the Council) the Council have much pleasure in stating that it is their intention to present annually a Gold and Silver Medal which will be awarded to those who have rendered eminent services to Africa. A Sub-Committee of the Council was appointed to make a recommendation as to the first recipient of the award. The Council are much indebted to Mr. Wellcome for his valuable help in this connection.

Lending Library.

The Lending Library has again been used by a large number of Members. Forty books have been added to the Library during the year.

After reading the Annual Report, the Chairman delivered his farewell address on retiring from the Presidency of the Society. (This is reported on page 83.)

Mr. Henry S. Wellcome said :—

I have been requested to move the adoption of the Report and Accounts, but our President has already for the most part moved it himself in his address, and has dealt with the Report so fully as to leave me very little scope. As to finances, we may find some consolation in the fact that all other scientific bodies and similar societies are suffering from the same malady that we are. They all have been obliged to increase their subscription rates, and it has become necessary for us to increase ours, as the President in his address has recommended.

We are greatly obliged to our retiring President, Sir Harry Johnston, for his great activities and strenuous work in promoting the objects of this society. The JOURNAL OF THE AFRICAN SOCIETY is ably edited by Sir Harry Johnston and Sir Howard d'Egville, and it has already played a very important part in the Society's work, and in many ways has done an immense amount of good. It is read and appreciated all over the world by scientific men and others interested in Africa. The JOURNAL has done a large amount of highly valuable work in the way of collecting and publishing vocabularies, and in promoting the study of the native languages of Africa, and has dealt with ethnology and many other important African subjects. In regard to membership, I would urge that every member should try to bring in at least one new member, and in this way increase the strength and usefulness of the African Society. There are many great African problems to be solved, and there are many who, like ourselves, are interested in these problems and who, no doubt, if approached, would be glad to join the African Society. This Society can render valuable service if well supported. Amongst our members there are already many distinguished workers. Our new President, Lord Buxton, has a large and valuable experience in Africa and of Africa. Our past President's great African work in the field and at home is well known.

We are favoured to-day by the presence of our Vice-President, General Sir Reginald Wingate, who, on account of his strenuous activities in Africa, has seldom been able to attend our meetings. Sir Reginald is a distinguished soldier, administrator and pro-Consul, who in a most self-sacrificing way has loyally devoted forty years of his life to the benefit of Africa. For some twenty years of that period he served as Sirdar and Governor-General of the Sudan, and then succeeded Lord Kitchener as British High Commissioner in Egypt. His services to the Empire have been of the very highest order. His heroic part as Kitchener's "right hand" in the re-conquest of the Sudan can never be forgotten, and he ranks as one of our great Empire Builders. Sir Reginald is a renowned linguist, with a wide knowledge of Oriental and African languages, and he has manifested deep interest in the work of our Society. I move the adoption of the Report.

Captain Frederic Shelford seconded the adoption of the Report and Accounts, and the motion was carried unanimously.

ANNUAL SUBSCRIPTION.

The Chairman reported on the proposal of the Council to raise the annual subscription from one guinea to one and a half guineas, and said :—

I need hardly put it before you any more than I have done, both in my address and in the report that I have read to you. If these two things do not bring it home to you then I despair. I hope it will have your approval.

Sir Robert Hamilton asked if it was merely an appeal to the members to increase the subscription, and whether the Council were not empowered to increase the subscription?

The Chairman: The Council apparently have no such powers, and we therefore have to put it to the Members for their approval of this course, and that is what I am now putting to the meeting. The proposal was then put to the meeting and carried unanimously, *the Chairman* adding: The Council will feel that it is a mark of confidence in their efforts.

THE NEW PRESIDENT.

At this stage Earl Buxton took the chair as the elected President.

Earl Buxton said :—

In a few moments I shall have a very pleasant duty to perform. Before doing so I should like to thank the Council for having elected me President for the coming year. I consider it a great compliment to have been elected President of the African Society. It gives me a rather special pleasure as I had the great advantage of being a friend of Mary Kingsley, in whose memory the Society was founded, and I feel a considerable gratification that I should now be President of the Society, and take an active part in its proceedings. I would like to say this, that when I was approached by representatives of the Council in regard to taking the Presidency I said there were two objections. The first is, I came back from South Africa after six very strenuous years, rather the worse for wear, and I am not prepared to undertake any active work for some little time to come. The second was a more serious objection, and it is this: Up till now this Society, as Sir Harry mentioned in his Address, has confined its interest and operations, and its JOURNAL, very largely to tropical Africa. As regards tropical Africa I am woefully ignorant, and I thought the Council would do better to have for their President—particularly at those luncheons that are held, and which seem to upset the digestion of your President—somebody who could, as Chairman on these occasions, be able to speak with some knowledge and some authority on the questions discussed, instead of a President who, if he says anything, must say it from the most fundamental ignorance. Your

Council took this great disqualification into account, but, nevertheless, asked me to become the President, thinking perhaps that as far as any speech which a Chairman on these occasions has to make, that Chairmen very seldom know anything about what they are talking, and that my ignorance would not compare very unfavourably with the ordinary run.

Work of the Society.

However—as I said just now, this Society had rather confined its work to tropical Africa and West Africa, it is, I understand, now desired to extend the interest and operations of the Society to all parts of Africa; and, therefore, though I have no knowledge of tropical Africa, I have at all events some experience of southern portions of Africa. I am quite sure there is a great field there also for the operations of the Society, and anything I can do in assisting in that direction I shall be glad. There you will find interesting questions arising in all the Protectorates, and in the Union also plenty of interest in regard to native questions, as long, of course, as you keep away from politics. I shall be glad to do what I can to assist if it is desired to extend the operations of the Society to include South Africa as well as the tropical parts.

The Retiring President.

Before making the presentation might I just say a word in reference to your retiring President. I am glad to think he and I have been friends for many years, and it is a great satisfaction to me to have the honour of following him as President, though, as he told you, he has forty-one years' knowledge of tropical Africa, as against my entire ignorance. At all events I shall not read you a paper on "The Mammalian Fauna of Africa" for my Presidential Address.

I feel sure I am expressing your opinion as well as my own when I say how very much we are indebted to Sir Harry for what he has done in connection with the Society. As he has pointed out in his address, he has been President for four years of this Society. But what I think the Society is especially indebted to him for is that two years ago, when the war brought difficulties to this Society, as it brought difficulties to other Societies, he undertook the Presidency, and his great activity and unique experience has done much to get over those difficulties, and to place the Society on a better basis, and to enable it to extend its operations and do greater work in the future than it has done in the past. He has a knowledge of Africa, especially of tropical Africa, which few others can approach. He has been everywhere and done everything. He has a knowledge of the topography, and especially languages, in connection with which he has done some splendid work. He is also thoroughly acquainted with the history and zoology of the country, and is looked upon as an authority. I know also that he has a faculty of writing in an attractive way and in good English, which

is not always the case of some writers in regard to Africa. I am not at all sure, however, that he does not enjoy controversy, especially when he is attacking somebody else when they go for him.

He has done magnificent work in connection with Africa, and work for which we are particularly indebted to him.

Presentation of Gold Medal.

That prelude brings me to the duty which has been placed upon me, and which I have very great pleasure in undertaking this afternoon. The Society a little while ago came to the conclusion—a very wise conclusion I think—that they would annually present a gold and a silver medal to the two persons who, in their opinion, had carried out the most eminent services in connection with Africa. Mr. Wellcome was good enough very generously to defray the cost of these medals, and present them to the Society for their purposes. This is the first occasion upon which the Gold Medal is to be presented, and there was no person to whom they could present it with greater certainty that it was well deserved than your retiring President, Sir Harry Johnston. It is a compliment to him that he is the first person to receive this Gold Medal, and it is equally a compliment to the Society that they have been able to present it to him.

There is, however, one little unfortunate matter in connection with the medal, and that is it has not yet arrived. In the words of the Prime Minister, the person who is making it has not yet been able “to deliver the goods,” and therefore Sir Harry must take the will for the deed, and I present him with this card, which is equivalent in value and equal in importance to the Gold Medal, which he will subsequently receive.

Sir Harry Johnston, in reply, said:—

I value deeply the compliment that has been paid to me, but I must say I am suffering some embarrassment in receiving the presentation of this medal. It was put forward by me to the Council of the Society at the suggestion of a member who is now in South Central Africa. I had no wish, when I put the matter before the Council, that I should be the first recipient. The Council endorsed the proposal, and Mr. Wellcome came forward and found the means. But I asked at the time that my name might be kept out of the list of possible recipients altogether. However, the Sub-Committee made the award and when the result was communicated to me I felt it would be ungracious to refuse. I regard the award as a great honour, but at the same time, a public recognition of the fact that I have been trusted with the publication of the researches of a great many other people, many of whom are now dead.

In this respect I really feel that I am a trustee for about one hundred persons, living and dead, who have helped me to compile a comparative study of African languages. The full extent of that work is not known to most of you present, because it yet awaits publica-

tion. Lord Buxton has unnecessarily apologised for being more South African than West African, but, as I said in my address, the whole of Africa is inter-dependent, especially in regard to races and languages. I hope, in taking up this position as President of our Society, he won't feel anything but fully qualified to carry on the work. Lord Buxton has spent six years in South and North Central Africa, and has been Under Secretary of State at the Colonial Office.

Capt. Frederic Shelford said :—

I understand that this is the end of our business, and before we part I would like to move a hearty vote of thanks to Lord Buxton, not only for having accepted the office of President, but for having attended here this afternoon. I should like to emphasise one point made this afternoon, that the African Society has been in the past rather associated with Tropical Africa, particularly the West Coast. The explanation I think is, that so many of our members are officials in Africa, and that on the West Coast they have short terms of service, come home frequently, and address us at our luncheons, about that particular part of Africa. That is the explanation I think of how it is we always seem to be dealing with West Africa rather than any other part. Therefore, we particularly welcome Lord Buxton.

The Chairman briefly replied and the proceedings terminated.

MEETINGS OF THE SOCIETY

A MEETING of the African Society was held at King's College, Strand, on the afternoon of Friday, October 29th, 1920, when the Rev. Edwin W. Smith, F.R.A.I., delivered a Lecture entitled "Native Customs of the Ba-ila of N. Rhodesia," accompanied by a number of extremely interesting lantern slides. Sir Harry H. Johnston, G.C.M.G., K.C.B., D.Sc. (President of the Society) presided. Amongst those present were:—

Mr. F. W. Brett, Major F. Charlesworth, M.B., Sir George Denton, K.C.M.G., Mrs. Dunning, Mrs. Gouldsbury, Mrs. Digby Jones, Captain L. W. Le Chard, Mr. and Mrs. Crawford Maxwell, Mr. A. C. R. Miller, the Rev. H. J. Taylor, Prof. E. H. L. Schwarz, Mr. E. O. Teale, Miss B. E. Virtue, Miss A. Werner, and Mr. T. R. Williams.

The Chairman, in opening the proceedings, drew attention to the marked distinction of the lecturer as a Bantu student. Mr. Smith some sixteen years previously had published a treatise on the Ila language of great value to philologists, and his just issued work on the Ba-ila people was of outstanding importance in anthropological literature.

Mr. Smith then delivered his lecture, a summary of which will be found on page 89.

At its conclusion, *Sir Harry Johnston* said:—

There are very few missionaries in Africa who have done such remarkable work as the lecturer to-day. He has been most modest about himself. As regards the political effect of his book—well, if anyone questions the value of mission work, let him read the book and judge for himself. I quite agree with what he says about the administration of the Chartered Company in that direction. I say that because in some other directions and as a politician I have criticised the Chartered Company for a certain influence that has crept into their councils emanating from the south, from men now dead, and who need not, therefore, be criticised. But north of the Zambezi their administration fully bears out the character that the lecturer has given to it. One regrettable thing is that the partner in the writing of the book, Captain Andrew Murray Dale, is not with us to-day.

The vote of thanks to the lecturer was carried with loud applause.

A meeting of the African Society was held on Thursday, December 9th, 1920, at 5 p.m. at the Imperial Institute, South Kensington, when Mrs. Ella Kidney, of Blantyre, Nyasaland, delivered a lecture entitled "Native Songs from Nyasaland," accompanied by vocal illustrations.

Sir Harry H. Johnston, G.C.M.G., K.C.B., D.Sc., the retiring President of the Society, occupied the Chair, and amongst those present were—

Mr. J. W. Allen, Sir Frederick Bridge, C.V.O., M.A., Mus.D., Earl Buxton, G.C.M.G., Sir T. Fowell Buxton, Bart., Prof. J. E. Duerden, Mrs. Dunning, Mrs. Gordon Fisher, M.B.E., Miss M. L. Fuller, Mr. J. Withers Gill, Major C. S. Goldman, Sir Robert Hamilton, Lady Johnston, Major Maxwell-Lyte, Capt. L. W. G. Malcolm, Dr. R. U. Moffat, Mr. G. W. Neville, Mr. L. N. Peregrine, Sir E. Denison Ross, C.I.E., Prof. E. H. L. Schwarz, Capt. Frederic Shelford, M.Inst.C.E., Lady Stanley, Capt. F. W. Taylor, Miss B. E. Vertue, Mr. H. S. Wellcome, Miss Alice Werner, Mr. A. Wigglesworth, Sir Reginald Wingate, G.C.V.O., G.C.B., Lady Wingate.

After an interval for tea, *Sir Harry Johnston*, in introducing the lecturer, said :—

Mrs. Ella Kidney has very kindly consented to come here to-day and give us an address, with illustrations, on the music of Nyasaland and the Lower Zambezi. Sir Frederick Bridge has done us the honour of coming and accompanying the music, which will be some guarantee that it will be worth hearing. The Mandingo countries are music-mad, almost. In South Nyasaland and Eastern Zambezia I think you find a flavour of the old Portuguese melodies. That theory was advanced as far back as Livingstone's days.

Mrs. Ella Kidney then delivered her lecture, which is printed on page 116.

Sir Harry Johnston, concluding the meeting, said :—

I am interpreting your wishes, I feel sure, when without unnecessary formalities I ask you to accord a hearty vote of thanks to Mrs. Kidney, to Sir Frederick Bridge, and to the other ladies and gentlemen who have given us these remarkable illustrations of Zambesian and Nyasaland music. Mrs. Kidney, in pursuing these researches, has really rendered an Imperial service. She is bringing home to all of us what there is of common humanity between us and the races of Africa, in spite of any difference in skin-colour. It all goes to show, I think, that however much we differ in features or skin there seems to be a remarkable similarity in the way in which we rejoice, and in the way we take our sufferings and our sorrows. In Mrs. Kidney's work you have an example of what a woman can do, and it is perfectly wonderful what women are doing to-day in opening up our knowledge of Africa.

Sir Frederick Bridge expressed his very great interest in the music that had been given them that afternoon. He added: I may say it was something like a year ago Mrs. Kidney wrote to me to know if it was possible to do something in putting the music before the public. I saw at a glance from Mrs. Kidney's letter that it was worth a good deal of consideration, and the result was that I did devote some time to it. She was good enough to send some music, and I took it with me during my holiday in Scotland and studied it a good deal. I was able with her permission to put in some of the accompaniment. It was not an easy thing to do when you are dealing with such delicate music. You have to be careful that you don't put it in any modern garb, and as I told her in a rather vulgar way, you cannot put a top hat and a frock coat on one of her naked natives. In any case I let her have her own way, and I think she has dressed them up rather well. It was a rather interesting thing that Sir Harry Johnston referred to in regard to the records he was making for his old friend Sir Arthur Sullivan, and I was wondering if it would be possible to have these records now.

Sir Harry Johnston: I will hand them over to you. They come from the Uganda Protectorate.

Sir Frederick Bridge, continuing, said: There has been a tremendous movement in connection with folk-songs going on all over the world, and selections have been made of all manner of folk-songs. It has been carried out by Mr. Cecil Sharp in South America, but I don't think anybody has done the same in Africa. From Mrs. Kidney's description of this delightful place I want to go there. She has whetted my appetite to such an extent that I am almost inclined to go. I would like to see that affair of making a drum. I feel very much the call of Africa coming upon me, but I seem to have so much work that I have already begun to despair of ever retiring. During the last two or three years I have been engaged in research work in regard to the music of the old cries of London. You would hardly believe the music that there was in those old London cries. Some of them were heard and mentioned by Shakespeare. There were some of the words used in *King Lear* and in *Romeo and Juliet*. The manuscript was lying dormant in the British Museum, and it had never been routed out. Let me ask Sir Harry Johnston to carry out his promise to let me have the records and see if I can make some use of them.

EDITORIAL NOTES

AN event of considerable interest to members of the Society, **Medal of the African Society.** and all those interested in African research, was announced at the Annual Meeting, when it was stated that the Council of the Society had decided to present annually a gold and silver medal, to be known as the medals of the African Society, to the persons who, in the opinion of the Council, have rendered notable services to Africa. The rules connected with the medal have yet to be drawn up, but they will probably be of a nature which will permit of eminent services to the Continent in any direction being recognised. The presentation of these medals has been made possible through the public spirited generosity of Mr. Henry S. Wellcome, who has for many years taken an active part in the Society's affairs as a member of the Council.

It is with peculiar gratification that we have to record that the first gold medal has been awarded to our retiring President, Sir Harry Johnston. Apart from his great work for Africa as an administrator and as a student of its languages, its natural history, and its peoples, the Committee of the Council, who recommended the award, desire it to be placed on record in the editorial pages of the JOURNAL that the services of Sir Harry Johnston to the African Society and to its JOURNAL must always occupy a prominent place in the long record of his eminent services to Africa.

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THE delegates of the National Congress of British West Africa are now in England. Their object **Objects of the National Congress of British West Africa.** is to ask for such changes in the constitution of British West Africa as will give the people a more effective voice in both legislative and municipal government.

They advocate a constitution comprised of an Executive Council as at present composed, a Legislative Council of which half the members shall be nominated by the Crown and half elected by the people, and a House of Assembly composed of the members of the Legislative Council, and six financial representatives elected by the people, with the power of imposing taxes and approving estimates of revenue and expenditure. They ask also for the removal of judicial functions from the hands of the Executive, and the opening of all judicial appointments to qualified practitioners. And they protest against the partition of Togoland between Britain and France, and the handing over of the Cameroons to the French without the consent of the inhabitants.

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ON October 8th the delegates of the National Congress of **The Delegates and the League of Nations.** British West Africa had a formal meeting with the League of Nations Union. Professor Gilbert Murray, Vice-President of the Union, was in the chair. In an introductory speech he pointed out that, under the Covenant of the League of Nations, Powers that accepted mandates to administer "peoples not yet able to stand for themselves" are debarred from making profits from their administration. He deplored that mandates over enemy territories had been assigned without reference to the inhabitants, but said that "the War was such a large affair, the adjustment so enormously complicated, and its ramifications so various, that perhaps we were not justified in hoping it would end in absolutely the best way." With regard to the appeal for a greater measure of self-government, he pointed out that this was a matter outside the sphere of the Union he represented, except in so far that the Covenant of the League of Nations recognised that self-government is the ultimate aim in all cases.

Dr. Bankole-Bright, the honorary secretary of the Delegation, emphasised the loyalty of the Congress and stated that its aim was not to bring complaints against individual members of the Government, but to ask for a change in the system of government. At present the people are articulate only through the means of mass meetings, and it is significant that

some of these have been attended by senior Government officials. As a result of these meetings committees composed of Christians, Muhammadans and agnostics have been formed to carry on propaganda work for the acquisition of political rights.

The Hon. Casely Hayford described the system of government as it existed in West Africa before ever British Government was established. Under this system, he said, the people had a voice in the government and were governed by their own consent. Under the British Crown Colony system the Governor selects whom he pleases to the Council of the Colony, and his nominees, good or bad, are not chosen by the people. Mr. Hayford made it clear that in asking for popular representation it was recognised that the European merchants and pioneers in West Africa should be adequately represented. He quoted the palm-kernels export tax as an unpopular measure which would not have come into force if the people had been consulted. He complained that judicial functions in West Africa were exercised in some cases by members of the Executive who had no legal training, and objected to natives being debarred from employing counsel. At one time West Africans could hold even such appointments as that of Acting-Attorney-General and Chief Justice, but now the appointment of judge is barred to Africans. With regard to the Civil Service, he said that natives of West Africa, even those who had taken a high degree in European universities, are not allowed to occupy the better-paid posts in the Civil Service, and that West Africans, fully qualified to practise as doctors, are debarred from practising by reason of their colour.

With regard to Togoland, Mr. Hayford expressed respect for the French Government, and adverted to the absence of colour prejudice amongst the French, but declared that the peoples of Togoland are closely related to those of the Gold Coast, and would prefer to be under the British Crown.

Sir Willoughby Dickinson and Mr. Charles Roberts, ex-Under-Secretary for India, and Mr. John H. Harris, secretary of the Anti-Slavery and Aborigines' Protection Society, made sympathetic replies, in which the extent to which the

League of Nations was concerned in the objects of the National Congress of British West Africa were defined.

It must be remembered that the delegates are educated townsmen speaking on behalf of men like themselves. It is difficult to say to what extent they represent the still primitive pagan inhabitants of the Bush, and whether these would benefit by the constitutional changes for which the Congress asks. The whole matter requires very careful consideration. To take one point alone as an illustration : the Congress asks that the people should have a more effective voice in municipal government. It is possible that too large an element of popular control would be detrimental to the people's real interests. As soon as the connection between the *anopheles* and malarial fever was definitely established, the sanitary authorities in West Coast towns organised an attack on the mosquito, and issued by-laws that the townsmen found very vexatious. Sanitary officials, in the search for possible breeding-grounds of the *Anopheles*, invaded private houses and punished anyone whose compound was not in spick-and-span order. This caused a considerable amount of irritation in West Coast towns that found vent in the local Press. Since the average man—not in West Africa only—is inclined to be sceptical as to the practical value of scientific research, there is little doubt, if the townsmen had been left a choice in the matter, that they would have expressed through their votes a determination not to submit to the excellent but irritating regulations of the sanitary authorities. If there is a danger that too large an element of popular control in municipal government would have a reactionary tendency, there is equally a danger that it would hamper progress in legislation.

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THE inauguration of the British West African Congress tends to show that West Africa should no longer be regarded as composed of separate colonies, each comprising many separate factors, but as one self-conscious and articulate community. There are some respects in which the West African might, with advantage, express his new sense of racial consciousness. At present,

the educated West African is too ready to Europeanise himself, and not as discriminate as he might be in his adoption of European manners and customs. It is a pity that West Africans have so freely adopted European names. If the Aga Khan writes to the *Times* on behalf of his fellow-Muhammadans, the most ignorant Englishman who reads the letter realises from the signature that the Aga Khan presumably knows what he is talking about. But of those who read in the newspapers to-day that Mr. Casely Hayford and Mr. Hutton Mills advocate changes in the West African constitution, only the minority will know that these gentlemen are West African natives and, as such, are far better qualified than their names would suggest to represent the opinion of West Africa.

There is another matter that may seem trivial, but is, perhaps, not so trivial as it seems. Englishmen show their bad taste in their costume, and many West Africans show that they, too, have bad taste in copying it. *Décolleté* dress for women in England has been sanctioned by such long usage that it is taken for granted; but there is something unpleasantly startling to the European in the sight of an African woman dressed in an ordinary English evening frock. Now that West Africa is demanding a voice in its own affairs, might it not with advantage devise a culture of its own, a culture in which everything European eminently suited to West Africa should be adopted, but in which top-hats, Paris frocks and English patronymics should have no place?

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A CORRESPONDENCE has recently been running in the Press on the subject of whether Nigeria is a suitable place for women. Undue prominence was given to a trivial side-issue as to the effect of the climate on the complexion; and, on the other side, an unwarranted amount of stress was laid on recent improvements in health conditions. It seems to have occurred to none of the correspondents that the answer to the question is that it depends on the woman. Nigeria is unsuitable for the type of woman that cannot exist without dance-teas, but this does not affect the question, for Nigeria has no room either for her

male counterpart. The woman of Jane Austen's day—the woman who fainted if a mouse squeaked, and was covered with confusion if a man spoke to her—is practically extinct. Very many women to-day are eager and able to share man's responsibilities, and of these a sufficient number are qualified by energy and enterprise to help bear the burden of Empire. The life of a married woman in West Africa is lonely, but no lonelier than that of a bachelor. The comforts of married life can greatly increase the health of an Englishman in West Africa, and for this reason alone the presence of women of the right type are an asset in all but the most newly settled or most unhealthy districts. Women might, in the opinion of the Governor of the Gold Coast, play an even more important part in West Africa. In a speech made before the African Trades Section of the Liverpool Chamber of Commerce, on September 21st, Major-General Guggisberg expressed the opinion that the time was now ripe for women doctors in Africa.

The idea came from the Medical Department itself. They said they wanted medical inspectors of schools, to get to the bottom of disease amongst children, and so it was suggested that women should take up this work. He told them what it was they were aiming at, that each district should have its woman doctor, with its centre, dealing with all cases of maternity, with Africans working under them. The doctors would look after the mother and child, and then look after the child during the school period up to the age of 14 years, and thereby get into the confidence of the African woman. If they did not do something with that scheme he was ready to confess that his tenure of office in the Gold Coast was not a success. They would never get hold of the African woman unless they got the European woman to do it.

Major-General Guggisberg wished women in Africa to do, especially, women's work. Some women have proved themselves capable of doing what is regarded as essentially men's work. Alexandrine Tinnè was the first explorer to reach the Nyam-Nyam country, and if Mary Kingsley had stayed away from Africa on account of her complexion, it would have been a great loss to Africa. Mrs. Ella Kidney's recent lecture to the African Society on Nyasaland and Zambezi native music, with the results of its twenty years' study, is of itself a powerful argument for the white woman in tropical Africa.

SOME interesting features of the general trade conditions in the Union of South Africa are outlined in a cable dated January 3rd received by the National Bank of South Africa. In the course of this it is stated that the financial stringency continues with little hope of immediate improvement. The unemployment position is worse, particularly in the leather trade. Several coastal factories are closed, while others are on short time. Wholesale business generally continues dull; merchants are experiencing difficulty in moving stocks and financing arrivals—which have doubled owing to the unexpected execution of back indents and the delivery earlier than anticipated of current orders. The opinion is stated to be in an authoritative quarter that the country has overbought in a reckless manner, and some months must elapse before the excess goods are digested.

As to specific items, it appears that farmers are refraining from buying agricultural implements owing to the high prices. The markets for wool, mohair, and hides are inactive, and the competition at local markets for ostrich feathers is limited: the prices are lower and large quantities have been withdrawn.

As to coal, during the past month there was improved tonnage railed to the Ports. At the first sitting of the Coal Commission, which was recently appointed to consider *inter alia* the effective grading and pooling of South African coal for export or bunkering, they discouraged exports of low grade coal, and stated that there were already established markets in the Red Sea, Colombo, and Argentine. Shipments of full cargoes of Witbank district coal had also been made to France, Italy, and Greece, and a large expansion was expected in the next two years.

The imports into the Union for the ten months ended October last amounted to £88,093,601, compared with £44,133,828 for the similar period of 1919. The following particulars show the proportion of British to foreign imports:—

	Per cent.	Per cent.
From United Kingdom ...	53·8	compared with 44·3
Other British Possessions ...	12·2	“ “ 14·5
Foreign	34	“ “ 41·2

The Currency and Banking Act¹ came into operation on December 17th; and it is finally of interest to note that the Union Railways have issued a preliminary notice inviting tenders for the erection of terminal grain elevators in various parts of the country, and also for the supply of rolling stock.

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THE theory that crops may be benefited by human sacrifice dies hard. The Egyptians believed it thousands of years ago; the Bawenda people of the northern Transvaal believe it to-day. The Criminal Court at Pietersburg in the Zoutpansberg district recently had to try six men on a charge of murder. To ensure an adequate rainfall and the success of their harvest they had selected from the tribe a man whose particular qualification as a sacrifice was that he was an especially diligent and progressive farmer. He was killed and his severed head was taken to different pits of mealies and Kaffir corn, presumably with the idea that this ceremony would have a beneficial effect on the grain when it came to be used as seed. It is particularly noteworthy that there was no vindictive feeling against the man who was murdered. He was selected as a victim not for his faults but for his virtues.

The history of the Ashanti Wars affords an almost parallel instance. The Ashantis had so great a respect for Sir Charles McCarthy, the Governor of Cape Coast Castle, that they invited him to rule over them. Sir Charles, unable to pledge Britain to extend her responsibilities, refused the honour. The Ashantis considered that, failing Sir Charles McCarthy for their king, the next best thing was to have his head, the seat of the qualities they admired in him, as a fetish. In 1824 they made war on him for the possession of his head—and got it. Fifty years later, when the British forces entered Kumassi they found the head, gold spectacles and all, in a high place of honour in the Fetish House. So great was the veneration in which Sir Charles was held, even when dead, that no native would commit perjury after swearing on the head of McCarthy.

¹ This Act establishes a Central Reserve Bank, &c., for the Union

BOOKS REVIEWED

The Ila-Speaking Peoples of Northern Rhodesia. Rev. E. W. Smith and Captain A. M. Dale. (London: Macmillan & Co., 1920.)

To the ethnologist a large part of Africa is still almost unexplored. In the many books which deal with the natives of the continent there are superficial accounts of customs and of articles of material culture, but the reasons underlying the customs, and the social, political, and legal organisation of the people have been largely omitted. These two volumes illuminate the inner life of the Ba-ila of Northern Rhodesia, and for this alone they would be welcomed by ethnologists. Both authors have had long experience among the Ila people, and with an intimate knowledge of the language have been able to draw their information from natives who have not been influenced by Europeans. Mr. Smith has been a missionary among the Ba-ila for thirteen years, Captain Dale has lived among them as an official of the British South Africa Company and as a farmer for nearly as long. Their book shows that each has had that inestimable quality of sympathy so essential for anyone who seeks to gain an intimate knowledge of natives. It is melancholy to record that Captain Dale fell a victim to blackwater fever in 1919, owing to his constitution being weakened by war service; his share in *The Ila-Speaking Peoples* will be a lasting memorial to him.

Probably no European has sufficient local knowledge to warrant a criticism of the material contained in this work, but it can be said that it gives every indication of diligent and accurate research. It is impossible to do justice to a book of this kind in a short review; a few of the outstanding features are all that can be touched on.

In the first place a map showing the distribution of the Ba-ila and neighbouring tribes explains the chapters on history and tribal life. Numerous excellent photographs illustrate the physical types and material culture. The ethnologist and comparative philologist will welcome the

native names of the articles and of the customs described. The inclusion of these must have entailed a vast amount of work, but the scientific value of the book has been considerably increased. A long chapter on the Ila language warrants a detailed review in a journal devoted to linguistics, it must suffice to say that Mr. Smith is primarily responsible for it, and that the orthography followed is that used in his well-known *Handbook of the Ila Language* (Oxford, 1907).

There are chapters on the history, folk-lore, legal code, daily life, personal adornment, arts and crafts, and games of the people, in each case with detailed descriptions. Of particular interest is the account of iron-smelting, since it is accompanied by obscene songs similar to those recorded elsewhere in Africa at funerals and other important events.

The pre-eminent value of *The Ila-Speaking Peoples* lies, however, in its detailed description and analysis of religion, morality, sociology, and psychology. The difficulty of investigating these aspects of native life proves conclusively the skill and patience of the authors. Their chapters on religion and magic alone would place this book in the forefront of works on African ethnology. Rarely have we had presented to us such a vivid picture of the unseen powers which surround the African on all occasions, powers which he does not seek to analyse or define, but which are perhaps none the less potent on account of their vagueness. The difficulty which a European experiences in trying to understand such beliefs is increased by the fact that the native point of view differs greatly from that of the investigator, for example a Mwila regards an herbal remedy for snakebite and an amulet to obtain wealth as belonging to the same category. The elucidation of similar confusions of thought helps to show the native in his true light.

No European can be long in contact with Bantu people without realising the important part played in their lives by sexual matters. Previous to the publication of this work M. Junod seems to have been the only author who has probed the inner significance of this subject, and he has given us a careful account of the restrictions and rules governing sexual intercourse among the Thonga. (*Life of a South African Tribe*, Neuchatel, 1912.) Mr. Smith and Captain Dale are to be congratulated on doing the same for the Ba-ila, and thus giving us the reason for many Bantu practices which have been only imperfectly understood by Europeans.

To the social anthropologist "*The Ila-Speaking Peoples*" contains material of great value. Totemism has been carefully studied, and it is interesting to note that the social aspect

is preserved in the present rather decadent Ila practices. Another important feature is a long list of kinship terms, those of blood kin being particularly full. It is unfortunate that the authors have not been more explicit concerning the details of marriage with a woman two generations removed from the husband. Similar marriages have been recorded from other parts of the world (for example, W. H. R. Rivers, *Kinship and Social Organisation*, London, 1914), while in Africa the inheritance of a wife of the father's father has been recorded among the Baganda (J. Roscoe, *The Baganda*, London, 1911, p. 119), and Thonga (Junod, vol. 1, p. 249).

The Ba-ila are especially interesting from the ethnological standpoint since they almost certainly belong to the great eastern branch of the Bantu, yet their geographical position has left them open to influences from the Congo and Western Bantu. In addition to the linguistic evidence brought forward by the authors to show that such influence has taken place, they record several customs which strongly suggest Western Bantu affinities. Among these may be mentioned the use of skulls, the portrayal of human and animal designs, the method by which a man's life can be placed in some exterior object, and finally, matrilineal descent, though this also occurs among several Eastern Bantu tribes.

The Ila-Speaking Peoples is one of the very best books yet published on African ethnology, a book which should be read by every student of African natives, and more especially by anyone who is brought into personal contact with the Southern Bantu.

T. F. Mcl.

West African Forests and Forestry. By A. Harold Unwin, D.Oec. (T. Fisher Unwin, Ltd., 1920.)

This book covers so much ground that it is a very difficult work to review as a whole in a few words. It is just the book that men anxious to exploit the forests of West Africa need. Dr. Unwin modestly describes this great work as one that only refers "to some specific feature of the trees that are common or useful by which they can be recognised by an ordinary observer without botanical knowledge." That may be one of its virtues, but it does ever so much more than that, as any reader will soon find out. The beautiful and unique photographs of the trees alone do that. Now a modern merchant, before he embarks on any trade, wants to know something about the conditions of the country in which he is going to spend his capital. Well, so far as West Africa and the timber trade is concerned, this is the kind of book

he wants. In Chapter I. Dr. Unwin describes the forests of Western Africa, and in Chapter II. he describes the trees in those forests. He gives the enquirer a knowledge of the Forest Law. He tells him all about forest exports from the country. Then he takes his readers to the forests in different parts of West Africa, *i.e.*, Sierra Leone, Liberia, The Ivory Coast, The Gold Coast, Togoland, Nigeria, and lets you know what trees are cut there for export or for local use. He gives you their botanical and vernacular names, the conditions of working timber, imports and exports. He describes the work of the Forest Department with regard to plantations and afforestation. And finally he gives the merchant a description of the oil-beans, seeds, and nuts, initiates him into the oil-palm and kernel industries, and shows him what relation forests bear to agriculture. He ends the book by giving his readers a very valuable biography of West African forestry. Then comes the index, which to the intelligent reader is priceless. Let us close this review by attempting to show part of its value. The merchant is interested in "Camwood," so he turns to the index, and is referred to page 31. He finds its botanical name is *Baphia nitida* because this tree is found in Sierra Leone, whereas Barwood, or the so-called Camwood, of Nigeria, is the product of *Pterocarpus tinctorius*, or *osun*, which has not yet been reported from the neighbourhood of Sierra Leone, and could not have been absolutely killed out between the years 1835 and 1900. On page 34 he tells us "That this product of *Baphia nitida* is the true camwood is practically proved by the fact that this tree was first identified from Sierra Leone, whence it was exported." The local people, however, are said to prefer the cakes of Barwood, *Pterocarpus tinctorius*, imported from Southern Nigeria. On page 48 we are told that the wood is hard and heavy, and is used for making rice mortar pestles and walking-sticks. On page 73 we find it in Liberia. On page 273 we find that on the Cross River camwood (*Pterocarpus osun*) was sold at the rate of 409 billets per ton for the sum of £4 10s. On page 275 we find that there is a large fruited variety, and that this wood is not attacked by *Termites*. On page 287 we learn that *Baphia nitida* is found in Benin, and that the Timani name for it is *Cam*. On page 417 we find that camwood is the product of *Pterocarpus soya-auxii*, which is found in the Cameroons.

This book will be of great value to the prospector, the trader, and intelligent missionary or official who wishes to obtain a useful knowledge of the country in which he lives.

R. E. D.

A Naturalist on Lake Victoria. By G. D. Hale Carpenter, D.M., B.Ch., Uganda Medical Service. (T. Fisher Unwin, Ltd. 28s. net.)

The author spent several years on Victoria Nyanja (a spelling on which he correctly insists) investigating the life of the tsetse fly on behalf of the Tropical Disease Committee of the Royal Society. The book opens with a detailed account of the symptoms of sleeping-sickness and a history of the study of the disease, in which he is careful to discriminate between the sickness disseminated by *Glossina palpalis* and that for which *Glossina morsitans* is responsible. To the lay reader the most striking part of the book is the evidence of the minute care with which Dr. Carpenter conducted his investigations. To ascertain the length of a fly's life he caught, marked and liberated nine thousand flies. (There are twelve different ways in which a fly may be marked.) To discover what is the fly's favourite diet he analysed the stomach contents of twelve thousand flies. He even tethered a captured crocodile to afford statistics as to the number of flies that settled on the respective parts of its body!

When the Uganda Government first depopulated the fly areas it was hoped that after a period of years the life cycle of the trypanosome would be broken and the evicted inhabitants be able safely to return to their homes. Dr. Carpenter shows that this hope is fallacious, since the blood of the Situtunga antelope (*Limnotragus spekei*) maintains the cycle. As the fly is harmless without the Situtunga and the Situtunga without the fly the solution of the problem would seem, at first sight, to be the destruction of the Situtunga. Dr. Carpenter says, however, that this would be practically impossible, since the Situtunga, when persecuted, takes refuge in vast swamps impenetrable to man. Since, however, the fly does not breed in these swamps, the life-cycle of the trypanosome might be broken if the flies and the Situtunga could be kept apart for a term of years. It has been hoped that the *Glossina palpalis* could be exterminated by destroying the cover under which it breeds. This policy Dr. Carpenter condemns as too laborious and costly. He has discovered that the fly always chooses the most favourable available spot in which to deposit its pupæ, and suggests, therefore, as an alternative, the artificial creation of ideal breeding spots in which the pupæ may be easily collected and destroyed.

Those who, like the author, serve in the front rank of the fight against sleeping-sickness live lonely lives, subject to the never-ending irritation of insect bites and under the shadow of the danger of a painful and lingering death. Since no

money can adequately reward their services it is gratifying to find that Dr. Carpenter seems well content with the reward afforded him by the opportunity to study in his leisure hours forms of animal life other than that of the fly. He made an elaborate study of the protective warning and mimetic colours of butterflies, and succeeded in hatching out two collections of butterflies' eggs, the result of which afforded him the triumph of forging an important link in the chain of evidence that supports the Darwinian theory on the coloration of insects. He seems to think that this was his most notable achievement during his life on the Lake. Those who regard insects principally from an economic standpoint will hardly agree with him, but all will congratulate him on a richly deserved success.

In his idle moments the author even made a study of the language of monkeys, and succeeded in distinguishing fourteen separate sounds expressing eagerness, recognition, alarm, excitement, rage, pain, melancholy, dislike, a hunting call and a cry for help. One of the sounds, from the author's description, seems to be bad language, and one is used by the elder monkeys to comfort the babies. The author himself progressed so far in the monkey language as to imitate this last sound himself, when freeing a baby monkey from ants that were attacking it!

The book, illustrated by a number of admirable photographs, increases the debt of gratitude which all interested in Africa owe to its author.

The Natural History of South Africa. By F. W. Fitzsimons, F.Z.S., F.R.M.S., Director of the Port Elizabeth Museum. (Longmans, Green and Co., London, 1920. 4 vols. 12s. 6d. each vol.)

These four volumes, which are intended apparently as the first of a series, are devoted exclusively to the mammals of South Africa from elephants to dormice. Each has a separate section in which is given a brief account of its range and habits, its scientific name and, in most cases, its various native names. The description of nearly every animal is accompanied by an excellent photograph. The section devoted to elephants, based largely on the study of those in the Addo Bush, is exceptionally interesting. Everyone deplores the decision that the elephant herds in Cape Colony are to be destroyed—everyone, that is, except the farmers who live in the neighbourhood of the Addo Bush—but the author shows that the decision is justified. There is no permanent water in the Addo Bush, and consequently elephants break out of the reserves to drink on the neighbouring farms, and while on

these excursions do a vast amount of damage to the crops and the farmers' fences. They also kill domestic live-stock that wander into the reserve. To keep the elephants under control it would be necessary to build a big dam in the reserve and an elephant-proof fence all round it, and this would entail an expenditure which Cape Colony is not prepared to undertake unaided. The farmers set spring-cannon as traps for the marauders. An elephant mortally wounded by one of these was helped home by his wives, but eventually collapsed. The cows covered him carefully with branches torn from trees to shield him from the sun, and took turns to bring him water in their trunks. A Hottentot, who had the misfortune to annoy an elephant, saved his life by crawling into a dense patch of thorny mimosa scrub. At first the elephant attempted to haul him out of it with his trunk, but found the thorns too prickly. It then backed into the thicket and began systematically to beat it down by sitting on it. The Hottentot would inevitably have been eventually killed either by the weight of the elephant or the pressure of the thorns if his terrier had not so effectually badgered the elephant that it chased it through the bush and gave the Hottentot an opportunity to escape. One of the ponds to which the elephants resort has on one side a very steep bank. Sometimes the elephants that visit it, after drinking, amuse themselves by sliding down the incline on their haunches. Should some of the youngsters hesitate to go on this "waterchute," they are coaxed to the top of the incline and then pushed over the brink with a vigorous shove. These and a number of other stories of the Addo elephants show the peculiar suitability of Cape Colony's elephant reserve for the study of elephants under natural conditions, and emphasise the regret that all must feel at the prospect that within four years they will all be exterminated.

Animal Life in South Africa. By S. H. Skaife, M.Sc., F.E.S. (Published by T. Maskew Miller, Cape Town, and Basil Blackwell, Oxford. 1920. 15s. net.)

The price of this little book will seem high to those who estimate the value of books by their size, but it is very well worth the money. Intended primarily for the young, it is admirably suited for its purpose. Designed to accompany practical research, it is principally devoted to such forms of animal life as any schoolboy can study. Thus prominence is given to flies, scorpions, earth-worms, beetles, spiders and ticks, which each have a chapter to themselves, whereas the subject of lions—which are really far less important than ticks

—is dismissed in ten lines. The description of the life-history of various parasites forms an admirable introduction to a subject of vital importance. The book is copiously illustrated by excellent marginal sketches from the author's own pencil.

Colloquial Arabic, Shuwa Dialect of Bornu, Nigeria and the Region of Lake Chad. By G. J. Lethem, LL.B., Assistant District Officer, Political Department, Nigeria. (Published for the Government of Nigeria by the Crown Agents for the Colonies, London. 1920.)

The Shuwa dialect of Arabic is spoken by a somewhat illiterate people, and is corrupted by association with negro and Sudanese tongues, yet, owing to its isolation, it is less corrupt than the colloquial dialects spoken in such countries as Syria and Egypt. The book contains, in addition to the grammar, an English-Arabic vocabulary and a collection of sayings, proverbs, riddles and songs. These are given, not as models of composition, but because they contain many words and phrases of every-day use, and being written in doggerel rhyme are easily remembered. They are well worth the attention for their ethnological interest even of those who have no intention of studying the Shuwa dialect. The author acknowledges the generosity of Mr. G. J. F. Tomlinson, who generously resigned to him all the material that he had collected for a grammar of the dialect.

The Backward Peoples and Our Relations with Them. By Sir Harry Johnston, G.C.M.G., etc. (Humphrey Milford, Oxford University Press. 2s. 6d.)

In this little book Sir Harry Johnston surveys the backward races of the world from Tibet to Timbuktu and examines the causes of their backwardness. Nature is engaged in an endless struggle to exterminate the higher forms of life as, æons ago, it destroyed the labyrinthodon and dinosaur, and the backward races are those who have suffered most in the fight. The desiccation of great areas, the cold of the Polar regions, the trypanosome and the mosquito in the tropics, have been Nature's agents. Sometimes she has found an ally in man, for the conquests of the Hun, the Turk and the Arab have been factors retarding man's upward progress. Even, in some cases, man's religion has contributed to his backwardness. The white races of the world have fought against Nature, not only on their own behalf but on behalf of the backward races as well. To the white races the backward

ones owe many debts and not a few grudges. The missionary, the scientist and the engineer have worked and are working for them, but at the same time stronger races have oppressed and exploited the weaker. The backward races are now beginning to advance and to resent the tyranny of the whites, and there is a danger that a contest will arise, a contest so strenuous that Nature may in the end win a victory over man by setting one half of mankind against the other. To avert this the backward races must realise that the natural riches of their mines and forests cannot be developed without the aid of the white. The whites, on the other hand, must have done with the racial arrogance that sets up a barrier between black and white, and must cease selfishly to exploit the weaker races for their own benefit.

The Geographical Journal. Volume LVI., No. 5. (November, 1920.)

This number is largely devoted to matters of African interest. Major L. F. I. Athill describes a journey he made on a political mission through South-West Abyssinia which, from his description, resembles Ceylon, as described in the well-known hymn, in that every prospect is pleasing but man is vile. The slave trade, with all its attendant evils, still flourishes, and Major Athill was infuriated by the callousness shown by his Abyssinian companions towards a boy abandoned by the wayside and found dying of thirst. They justified their attitude by saying that the boy was in such a condition that he would never be any use even if he lived. Native officials are unpaid, and obtain a livelihood by driving the inhabitants of the districts they administer into litigation, either amongst themselves or against the Government, and then extorting bribes from the litigants. One official, whose administrative methods had earned him a nickname which means "the father of the fist," was expecting shortly to be relieved of his duties. To provide for his future he was engaged in "catching and selling the local population as rapidly as possible."

Major J. Stevenson-Hamilton describes the Dinka country east of the Bahr-el-Gebel. Although this country is an unpleasant one to live in and is infested with insect pests, it is unusually healthy. Blackwater fever is unknown; the tsetse-fly does not exist; horse-sickness is almost totally absent, and anopheles are rare. Such anopheles as exist are usually found in the neighbourhood of Government stations to which they have probably been brought by river steamers. The local Dinkas have vivid memories of Turco-Egyptian

rule, and the fear that British administration may come to an end haunts the chiefs and older men like a nightmare.

Mr. E. G. Sarsfield Hall reproduces two maps of one locality, the one compiled from survey work done by Mr. A. A. R. Boyce on the Darfur northern patrol, the other compiled from native information. The latter proved to be surprisingly accurate, in view of the fact that the native informants could not be made to acknowledge that any two sides of a triangle must inevitably be greater than the third.

The number contains also two unsigned articles. One gives recently obtained information as to the death of Boyd Alexander; the other defines the geographical boundaries of the Colony and Protectorate of Kenia, with especial reference to the dominions of the Sultan of Zanzibar.

The South African Journal of Science. Volume XVI., No. 5. (April-July, 1920.)

Mr. A. J. T. Janse makes out a case, on economic as well as scientific grounds, for an organised zoological survey of South Africa—a survey that should be undertaken without delay as the advance of agriculture is rapidly affecting its flora and consequently its insect fauna. Mr. D. T. Mitchell, Senior Veterinary Research Officer at Maritzburg, contributes two papers. The first is on the poisoning of cattle by feeding on *Paspalum dilatatum*, which, in its seeding stage, is infected by a fungus of the *Ergot* type. The other traces paralysis amongst cattle to a fungus (*Diplodia*) that grows on mouldy mealies to which cattle have access when they are turned into the mealie-lands in the latter part of the winter. Mr. W. Wilman contributes an article, illustrated by photographs, on rocks at Kopong and Loë, engraved with representations of the spoor of game. The Rev. Professor W. A. Norton writes on the native population of the South-West African Protectorate, and the Rev. C. Petman upsets some hitherto accepted ideas on the etymology of South African place-names.

Kolonial- und Kleinbahnen. By Professor F. Baltzer. (Walter de Gruyter & Co., Berlin and Leipzig.)

This handbook of information concerning the lesser-known railways of the world appears to be inaccurate, if we may judge by the fact that information is given concerning Deutsch-Südwestafrika, a part of the world which we do not now recognise under this name.

CORRESPONDENCE

To the Editor of the JOURNAL OF THE AFRICAN SOCIETY.

SIR,—When reading Professor Schwarz's interesting and, in the main, to me, convincing paper in the October JOURNAL, one point suggested itself to me as worth raising, and the fact that I myself visited Ngamiland in 1909 perhaps justifies my taking what might otherwise appear a liberty.

As is well known, the Ukavango River on reaching the plain of Ngamiland breaks up into a network of sluggish streams intersected with swamps, the so-called Ukavango Marshes, all more or less fringed or covered with papyrus and sudd.

Most of this water passes off into the Chobe, but a large amount still keeps its original direction southwards, and eventually drains off in the Tamelekan River, which, after being joined by the old Lake River, becomes known as the Botletle. This continues as a goodly stream for about a hundred miles, but soon after passing Rakops it dies away, and no longer, on the surface at least, reaches the Makarikari Lakes.

I was informed by the people at Tsau that up till quite recent times the most westerly of the Ukavango streams used to flow into Lake Ngami, and the people affirmed that it was the blocking of this inlet that caused Lake Ngami to dry up. Whether this is correct I do not know, but, presuming that it is so, it would appear that all that is needed to restore the former lake conditions would be the opening up of this channel—a matter that would probably be comparatively simple and inexpensive. The result would be that much of the water that now finds its way out northwards by the Chobe would take its natural and old course through Lake Ngami.

Judging from what I saw of the country, it appears to me that Professor Schwarz's scheme for blocking the Chobe might simply lead to the formation of a new Lake Ngami, extending over the more or less inhabited country in and around the Ukavango Marshes. On the other hand, by reopening the drain into the old lake area a good deal of land at present under water would be reclaimed. I may say that my object in visiting Ngamiland was not hydrography, but no observant person who sees the country can fail to become fascinated by the problems presented by its physical features. I make these few remarks with some diffidence, and only in the hope that they may elicit further information from Professor Schwarz on the main point raised.

I am,

Yours, etc.,

R. U. MOFFAT, M.D.

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NOTE.—There are many subjects in Africa; such as Racial Characteristics, Political and Industrial Conditions, Labour, Disease, Currency, Banking, Education, and so on, about which information is imperfect and opinion divided. On none of these complicated and difficult questions has Science said the last word. Under these circumstances it has been considered best to allow those competent to form an opinion to express freely in this Journal the conclusions at which they themselves have arrived. *It must be clearly understood that the object of the Journal is to gather information, and that each writer must be held responsible for his own views.*

SOUTH AFRICA AND ITS NATIVE PROBLEM ¹

I GREATLY appreciate the compliment paid me in my election as President of the African Society for the coming year.

I am somewhat alarmed, however, at following my friend Sir Harry Johnston. His knowledge of Tropical Africa is profound, my want of knowledge is abysmal. The Society is greatly indebted to Sir Harry for his successive Presidencies, and for the interest that he has always taken in the Society, and especially in the JOURNAL.

A woman was once asked if her husband was a Christian. "Yes," said she, "but he doesn't do much at it." I fear that, though I have been a member of the African Society since its inception, I cannot so far claim to have done much at it. I hope, however, to make up leeway in the future.

¹ Being the Presidential Address delivered by The Earl Buxton, G.C.M.G., to Members of the Society at a Dinner on March 15th, 1921. For report of other proceedings on this occasion, see page 217.

The African Society.

Just one word in regard to the Society. It has now been in existence twenty years. It has had its ups and downs, but on the whole it has maintained its position and extended its operations. Its original scope was limited to West Africa, but it has gradually taken all South Africa under its purview. Its main object is the philosophic and scientific study of African subjects, races, customs, history, and languages. Politics, Commerce, and Propaganda are outside its scope. It forms a Central Institution, which, through its meetings, lectures, dinners, luncheons, and Quarterly JOURNAL, brings together those interested in African questions.

The JOURNAL is a medium for the mutual interchange of ideas and of information. It supplies a common stock of experience to the advantage of those who have to administer, to travel, or to study.

The Society, of course, requires further support, and ought to be better known. It has, I think, hidden its light too much under a bushel; and I trust that all those here will help to bring it more into the light of day, and do their best to assist its work and extend its membership.

South African Racial Problems.

I am told that I must give a Presidential "Address"—an unappetising dish, especially after dinner. I have not found it easy to know what subject to take for my Address. Obviously, South Africa must be the theme. But what phase of it?

South Africa bristles with racial problems. There is the question of the relations between the two great White Races, complicated by the Constitutional problem of the connection of the Dominion with the Empire. There is the Coloured Community—the tragedy of South Africa. There is the problem of the Indians in South Africa; the Indians, in Natal, actually outnumber the Europeans themselves. Above all, there is the problem of the six millions of Natives in the Union, in Rhodesia, and in the Protectorates.

A discussion of the Constitutional and White racial question would hardly be appropriate to the Society, and I may have other opportunities of discussing it.

The Native Question : Unfair and Injudicious Criticisms.

I propose, therefore, to-night to deal broadly with the present position of the Native Question in South Africa—a problem which does not exist in the same way, or to the same degree, in any other part of the British Empire.

I think I may claim an hereditary, though, I hope, a common-sense interest in the Natives. Then, as Governor-General of the Union, and as High Commissioner of the Protectorates, and of Northern and Southern Rhodesia, of Basutoland, Bechuanaland, and Swaziland (with a special responsibility for the Natives in those Territories), I visited more than once the native districts and the native Territories of South Africa. These meetings with the Natives were intensely interesting; and the welcome given to me as the representative of the King was very gratifying.

In seeking to discuss the Native Question in South Africa a difficulty at once confronts me. The citizens of the Union, a Self-governing Dominion, are sensitive on the question of their Natives; and so is Rhodesia.

Well, I am certainly not going to criticise or to offer advice to the Union, nor to Rhodesia, nor to the Protectorates. Their citizens were good enough, when I was Governor-General and High Commissioner, always to receive anything I said in a very friendly spirit. I managed by good luck to skate safely over some very thin ice; and I don't want to fall through now and get a ducking.

But, indeed, I always found that the Powers-That-Be are ready enough to consider suggestions which are made in good faith, founded on knowledge of the circumstances, and reasonably and considerately put.

But they do resent, and I entirely sympathise with them, outside interference and proffered advice from people who are cocksure that they can solve offhand the most delicate and complex problems; and who take little or no account of local conditions, or of inherited and deeply-seated prejudices.

Especially do they resent criticism when those who criticise put on something of a self-righteous air, and assume that they and their associates alone have the welfare of the Native at heart, and imply that those who differ from them are actuated by obstinate or unworthy motives.

While giving these persons full credit for their sincerity, I say deliberately that advice so founded, or so proffered, hinders, far more than it helps, the cause which they profess to have at heart.

Especially is it resented by those Europeans who, locally, are doing their best to improve the conditions of the Natives. They consider the criticisms unfair; and they find that it makes their own task more difficult by spoiling the temper and hardening the hearts of those whom they are trying to carry along with them.

Tact and perception are great qualities in this world, and it is unfortunate that those who engage in these polemics are so often wanting in both. They would, I think, fail to appreciate the delicate consideration shown by a friend of mine. He was an inveterate bridge player. On one occasion he lost a near and dear relative; and for a fortnight after her death, whenever he played bridge, he always declared a black suit.

Native Feeling: Reasons for Unrest.

In considering the question of the Native in South Africa, one is hampered by the fact that even the most experienced and those most in touch with the Native are unable to give a confident opinion as to what the Natives, as a whole, are tribally thinking. It is only occasional events, like the Lovedale College outbreak, and the rioting at Port Elizabeth last year, and the passive resistance strike on the mines, which give an indication of the volcanic agencies which are working beneath the surface.

Unfortunately, however, there is no doubt that there does exist a very considerable feeling of unrest and discontent.

This, indeed, should not surprise us, for the Native, like everyone else, has been upset by the War, which has also brought about an economic pinch. If the clothes of the Native are scanty, he has to pay more for his blanket—and not such a good blanket as before. He has not benefited by the rise in the price of mealies, for the Native consumes what he grows, while he has to pay much more for the seed; and, moreover, of late, drought has played havoc with his crops.

Then, the more enterprising Native who goes further afield

and works in the towns or in the mines or elsewhere for wages, finds that, unlike the white miner and other white employees, his wages have not been substantially increased to meet the greatly increased cost of living.

But apart from the economic question, the Natives are waking up, and are beginning more and more to realise, and in larger and larger numbers, that they form a necessary part of the political, social, and economic factor in the development of the country, and that the conditions under which they live, the opportunities they have of advancement, are unsatisfactory and inadequate.

They realise that, for the most part, they have no voice in their own tribal affairs; that they have to pay hut tax, and have no control over its expenditure, while they have a well-founded suspicion that only a small portion of the tax is expended for their benefit.

They know that they have no Constitutional outlet or mode of expression for their grievances, nor any means of bringing them properly or effectively to the notice of the Government or of the White people of the Country; and that, except in the Cape Province, they are practically excluded altogether from the life of the Dominion. Laws affecting them are passed without any previous consultation with them, and the first they know about these laws is that they have to obey them.

They note that while money is lavishly expended on the education of the whites, it is grudgingly doled out to the Native; and that the expenditure on education is disproportionate to the native contribution to the public revenue.

The Natives who live in the towns are painfully aware that their housing and sanitation conditions in some or most of the large cities are deplorable.

They find that, though nominally equal before the Law, the quality of Justice is often strained against them. They are harassed and humiliated by pass laws and prohibitory and mandatory regulations. When they go to work in the Transvaal they find that they are debarred from all but the least skilled work.

Then, again, the era of the great and autocratic Chiefs of the past, Moshesh, Lobengula, Cetewayo, Lewanika, is

over and gone; Khama, of benevolent rule, alone remains. No Chief, in the future, can hope to hold the same position or to exercise the same influence and authority, for good or for evil, as these and other chiefs have done in the past. Yet no tribal Authority has been put in the place of these Chiefs, and something is needed to fill the void.

A friend of mine, the Chief Regent of Swaziland—a masterful personality—the Grandmother of the young Chief, complained to the Resident Commissioner the other day that her authority was being undermined, and that she was not being treated with proper respect, and implored him to allow her a free hand with these firebrands. A free hand meant, of course, an assegai in their backs. The Resident Commissioner, with a callous want of appreciation of her difficulties, refused her request.

Civilisation and Authority now control and hamper the Native in every way in his tribal areas. He must not do this, that, nor the other. All his former interests and excitements, his former “pleasures of life,” are “verboden.” He must not drill; he must not fight; he must not kill nor raid his neighbours, individually or collectively; in some parts he may not even carry an assegai; “Smelling out” and the practice of Witch Doctoring lead to imprisonment or the rope. The life of the Natives has become very drab and dull, and they have plenty of time to brood over their grievances—a fruitful field for the agitator.

The Natives have, moreover, got to hear about the “League of Nations,” and the Nationalist agitation has turned their eyes towards Self-determination for the Black as well as for the White.

As General Smuts declared in his speech, on the second reading of the Native Affairs Bill: “The Natives are losing faith in White men, in White education, and in White religion. The old feeling of trust and respect for the White men is disappearing, and a feeling of estrangement is growing up in its place, which bodes ill for the future of South Africa.”

This feeling of unrest undoubtedly constitutes a serious menace to South Africa. At the same time, I do not think it constitutes an actual danger. As one of the Labour Con-

tingent said to me when he came back from France, "Our assegais are no good now; they could not reach an aeroplane." Indeed, in these days of aeroplanes, motors, good roads and telephones, if a native rising—which Heaven forbid!—should take place, though it might result in some murder and damage, it would have no chance of success, and would be speedily and easily suppressed. But its occurrence would be lamentable, and would be a blot on the escutcheon of the Union and of the Empire.

Improvement of Natives' Position.

All this may seem a somewhat pessimistic view, but there is a silver lining to the shield.

During the six years I was in South Africa, it was clear to me that a distinct improvement was taking place in the general attitude of the European population as a whole towards the Native.

I am also satisfied that the passing of the Native Affairs Act of last session marks a significant advance; for it constitutes a real and effective attempt to meet some, at least, of the practical grievances of the Natives. I doubt if the far-reaching provisions of this Act, as affecting the Natives, are sufficiently realised over here. I would propose, in a few minutes, to summarise its provisions, and to show how far, and in what way, the grievances of the Natives have been met.

Then, again, the loyalty and law-abidingness of the Natives during the whole of the war, and after, was very marked. They contributed some 80,000 men in various non-combatant capacities and in different spheres of action, and rendered very material assistance.

Take, again, the question of Education. Of late increased grants have been given, and there has been a considerable extension of native education. The reproach that the Natives were paying everything and getting little or nothing in return, has been somewhat mitigated.

Moreover, and this is a very important point, within the last year or two the Government have established a Native College, which will, it is hoped, lead up to a Native University College, where those fitted to take a higher or University

education will have an opportunity of matriculating in South Africa, instead of having to go to the United States, whence they often came back with pernicious ideas.

Then the position of the Native women is improving. At my farewell gathering of the Natives at Johannesburg, a few months ago, the representatives of the women presented my wife with an Address. The spokeswoman read the Address in excellent English; she had taken a University degree. This was the first time, I believe, that Native women had taken part in such gatherings, and the first time that an Address had been presented by Native women to the wife of a Governor or High Commissioner.

Fortunately, during the period of the war, South Africa had at the head of affairs General Botha, a friend to the Native, and one who held enlightened views on the subject of their welfare. They, with their usual instinct, realised this, and greatly lamented his premature death.

Fortunately also for South Africa, General Botha's mantle fell on General Smuts, who has studied the Native Question, has sympathy with the Native, and who realises the dangers that are ahead, and that the policy of drift could no longer safely continue.

Native Affairs Act.

In my Official Speech, last Session, the Native Question was given a prominent place. This is the first time that the Native Question has been referred to in the Official Speech since the Union; or, indeed, I believe, in that of the Cape Parliament, for over twenty years—a somewhat memorable and significant event.

The Native Affairs Act was itself a serious attempt to deal with and to solve some of the practical and pressing grievances of the Natives to which I have already referred.

The Act may be divided into three parts :

1. The appointment of a Native Affairs Commission.
2. The creation of Local Councils in native areas.
3. The institution of Native Conferences, to be convened from time to time.

The Commission is to consist of not less than three, nor more than five members, and the chairman will be the Minister of Native Affairs—that is, the Prime Minister. The Commissioners are to be men who have a knowledge of the Natives, and who take an interest in them. They are to give individual attention to the circumstances and the desires of the Natives, and will be the “ears and eyes of the Prime Minister.”

The result will be a real and constant personal contact, with personal discussion between the Natives and White men who understand them. Paternal relations, personal contact, and the personal equation, are essential factors in dealing with the Natives, especially with the “blanket kaffir.”

Travelling in the Protectorates, in the wilds of Northern Rhodesia, Bechuanaland, and elsewhere, and coming into contact with the Natives, and the Officials who are looking after them, I could not fail to be struck with the wonderful confidence that the Natives repose in the one Englishman who is often alone responsible for their welfare and peace. They trust him, they lean upon him and they look upon him as their guide, philosopher, and friend; and, with singularly few exceptions, he fully repays their confidence.

Apart from the main administrative duties of the Commissioners, and their duty of keeping in constant and friendly touch with the Native, there are certain big problems with which it will be their duty to deal by way of advice to the Government.

First, the very delicate and troublesome problem of Territorial Segregation—that is, the land delimitation of the White and Black Races—a question which has given rise to much agitation and suspicion on both sides. This difficult problem can be dealt with better when the administrative and economic positions have been placed on a more satisfactory footing; and when the Natives can be consulted as well as the Europeans.

Secondly, the profoundly important problem of the Native Communities which have sprung up in the large urban, mining, industrial, and populous centres of the Union. No foresight has been directed to this question. The policy of

drift has brought about a grave state of affairs, and one detrimental to the good relations between the White and Black races.

Thirdly, the question of Native Taxation, and how far the revenue now derived from the Natives is properly and sufficiently expended for their benefit.

Besides these, there is the question of Native Education; of the development of Native Agriculture and Industries; and of the Pass Laws.

Everyone agrees that the Pass Laws should be reformed and simplified. These laws, although in theory a protection to the raw kaffir, are undoubtedly a source of provocation and annoyance to the Natives as a whole.

The second step is the creation of Local Councils in the native Urban areas on the lines of Rhodes' Glen Grey Act of 25 years ago, which has since been extended to the more enlightened part of the Transkei. This Act has been a real success, though its powers may well be enlarged.

The Basuto, under the High Commissioner, also have their Council, much valued by them, and which is of real use in ascertaining the views of the Chiefs and Headmen, and thus securing their influence and goodwill in carrying out any decisions at which the Administration may arrive.

The object of these Local Councils is to give to the tribal natives a real opportunity of managing and being responsible for their own affairs, and of dealing with local matters which affect them, and of enabling them to spend the money they contribute to their own advantage.

The Local Councils may provide for the construction and maintenance of roads, dams, and drains; the prevention of erosion; for improved water supply; for the suppression of disease of stock by means of dipping tanks; for sanitation and hygiene; for improvement in the methods of agriculture and afforestation; for the establishment of hospitals, and especially for educational facilities.

One very important provision of the Act is Finance. At present, the ordinary Native, living under tribal conditions, pays £2 a year per head as hut tax. Under the provisions of the Act, the Local Council can expend on the above pur-

poses an amount up to £1 per head a year. To the extent that they spend money on these local matters up to twenty shillings, the Government taxation will be reduced. The expenditure of the Local Councils on these purposes will, therefore, not be additional to, but in substitution of existing taxation.

The Native Conferences are to be convened on the recommendation of the Native Commission, and will consist of Chiefs, members of Native Councils, prominent Natives, and of Native Delegates invited from any Association which represents Native political or economic interests.

The object of the Conferences will be to ascertain the views of the representatives of the Natives of the Union, or any part thereof, in regard to all matters affecting them. That is to say, that before any measure affecting them comes before the Native Affairs Department, the Government, or Parliament, the Natives will be made aware of the proposals and the reasons for their introduction, and will have an opportunity of discussing and considering them.

In future, therefore, the Government and Parliament will be in a position, through the Commission and through the Conferences, of ascertaining, before they take action in regard to any Native question, what is in the minds of the Natives. Thus, a very legitimate grievance will be removed, and the present friction and suspicion, which nearly always accompanies the introduction of any Bill dealing with Native affairs, ought to disappear.

The late Mr. Moffat, whose death was a great loss to South Africa, once said, with much truth, that the Native with a grievance "always likes to air it, and is more contented if he is told that it has been considered, and that it cannot be remedied, than if he is left in ignorance whether it has received attention or not."

In all these matters it is essential, not only that the Europeans themselves should be convinced that they desire to be just and fair to the Natives, but that the Natives should also be convinced that they will be treated in such a way that, as General Smuts said: "Their legitimate desires and ambitions should be satisfied."

The three Commissioners who have been appointed, Senator Roberts, of Lovedale, a level-headed man, Dr. Loram, of Pietermaritzburg, who has taken a great interest in Native Education, and General Lemmer, are all men with knowledge of, and in sympathy with, the Natives. In the Prime Minister they have a Chief who is deeply anxious that the Act should constitute a real, live advance in the position of the Native.

The Act is, of course, but a first step, and will have to be followed by further legislation in the interests of the Natives. But the Government will be able to build on solid ground, and in any future advance it will be able to act with greater knowledge and greater certainty of success than in the past.

One word as to the attitude of the House of Assembly in regard to the Bill. It met with favour, and received general support. The division which took place on the Third Reading of the Bill (the only division which was challenged) was very significant of the change which has taken place in public opinion. Thirteen members, Nationalists, alone voted against the Bill, the other Nationalists, the South African Party, and the Unionists voted for the measure.

Two Extremes: The Act a Safe Advance.

There are in South Africa two dangerous points of view in regard to the Native Question—the two extremes.

There are those who hold the view that the Native must be kept down, and that he must not be given a chance of improving his position; that he must remain a hewer of wood and a drawer of water.

There are, on the other hand, those who talk of the Black man as the equal of the White man, and who insist that he should be placed on terms of equality in every respect with the White man.

The one point of view is inhuman, and the other exceeds the bounds of possibility or of common sense.

It is, of course, possible that some of the Natives, stirred up by their more extreme agitators, who will only be satisfied with the concession of "political rights" and the abolition

of the "colour bar" where it exists, may refuse to look with favour on the Act.

But the Native might as well cry for the moon as ask, within a measurable time, for the adoption in the Transvaal or in the Free State of either of these demands.

Then, again, some of the Chiefs may take the view that their authority and power will be curtailed by the proposals of the Bill, and may influence the "raw natives" to receive the proposals with suspicion or hostility.

I feel confident, however, that the Natives of South Africa, as a whole, will welcome the Act, will be grateful for the advance which has been made, and will recognise the spirit in which the Bill was introduced and passed.

To the European, the Act constitutes a safe advance and an effective safety-valve.

To the Natives it means that, instead of being voiceless and hopeless, they will now have a definite voice and decision in their own local affairs, will be in direct touch with the Commission, and will be able to express their views through the Conferences. They will thus enjoy a greater feeling of security and confidence than they have been able to feel in the past.

I rejoice that one of my last official acts was to give my assent to the Native Affairs Bill.

Welfare of Native Races.

The question of the Native races of Africa is one of absorbing interest; and the welfare and the future of these Child Races of the Empire is one of special moment. They are a great asset, but also a grave responsibility.

The African Society devotes itself to the right understanding of this far-reaching problem; and, as its President, I earnestly appeal to the public for increased support.

THE ENCROACHMENT OF THE SAHARA ON THE SUDAN

IMPRESSED on the parched surface of the Sahara is the skeleton of an ancient river system; regions which are now uninhabitable bear signs of the former existence of a sedentary population; besides abundant fossil remains of aquatic beasts the presence of a strangely varied fauna native to less arid regions has been reported in the very heart of the Sahara. Indeed, there exists abundant evidence that this vast area, now sparsely peopled by a few tribes of predatory nomads and such few agriculturalists as have tenaciously clung to the ever shrinking oases, was once capable of supporting a comparatively large sedentary population.¹ The change took place before the dawn of history. Our earliest records of the southern fringes of the Sahara, the region with which we are now chiefly concerned, date back to a period not earlier than the seventh century A.D., when the distribution of desert and oases, barren plains and fertile forest lands, was much as we find it to-day. M. Duveyrier's contention that "*depuis les temps historiques un changement climatérique complet a eu lieu dans toute l'étendue du Sahara, au moins sous le rapport de la quantité des pluies,*"² cannot now claim many supporters. It is equally hard to accept M. Gautier's³ suggestion that in historic times the Niger flowed northward from Timbuktu and emptied itself into the depression known as the Juf, though this may well have been so at an earlier period. That modification has taken place in certain regions of the Sahara and Sudan during historic times is generally agreed, but the nature and extent of these more recent changes still remain matters of doubt. Nor can any definite conclusions be expected till thorough scientific exploration has provided the necessary material for careful research.

Scattered through the abundant literature of these regions

there occurs much fragmentary evidence relative to desiccation. In the present paper an endeavour has been made to show that from a consideration of the more important evidence it would seem that in certain areas the Sahara is encroaching on the Sudan and, furthermore, that whatever may be the other causes at work, man himself is to no small extent responsible for the desiccation of oases and the fertile plains which lie beyond the actual confines of the desert. In the face of evidence which is sometimes contradictory and often of doubtful value no pretence is made to arrive at definite conclusions.

The greater part of the Sahara having reached the extreme limit of desiccation, it is rather to its outer fringes, where desert conditions give way to steppe and open bush, that we look for evidence of progressive desiccation. In a consideration of the process by which oases revert to desert will be found a lesson and a warning, for the same influences which combine to reduce the cultivable areas within the desert appear also to be causing the encroachment of the Sahara on the fertile plains of the Sudan and other fringing areas. It may be well, therefore, to consider first certain evidence of desiccation in the desert itself.

The Romans had not been long in occupation of the North African littoral before they realised that the desert is a relentless foe against which man must wage unremitting war. In the tropical rain-belt of Central Africa the forest is ever ready to reclaim as its own any uncultivated farm; similarly in the Sahara the desert will surely creep in and swallow up an oasis that has been abandoned by man. This is the great law of the Sahara and is in accordance with the theory of Rickmers, who assumed the inherent tendency of deserts to expand. In Tripoli and Fezzan extensive ruins indicate a degree of prosperity which has long since departed. As the Empire waned Tripolitania declined. The desert crept in, bringing with it predatory tribes of nomads. To its departed glory there is no more eloquent testimony than an ancient Roman gateway at Gherria, in the hinterland of Tripoli, which bears the inscription PRO. AFR. ILL. (Provincia Africa Illustris). In Fezzan we find a similar state of affairs. Besides the remnants of

Roman civilisation there are extensive ruins which date from a far more recent period. There is abundant evidence that the prosperity of Fezzan has been but recently lost, so recently, indeed, that the desert cannot be said to have won the day. Some hope is entertained of re-establishing its former large and prosperous sedentary population. The recent decline is due in large measure to the Turks, who, by their devastating conquest, did much to reduce the cultivated areas. Excessive taxation further served to drive many of the survivors to seek a livelihood elsewhere. The prosperous mercantile community was reduced to penury by the European occupation of more southern regions, which effectively put a stop to the slave trade. The ravages of Rabeh in Bornu at the beginning of the present century finally extinguished the trans-Saharan trade and thereby completed the ruin of the Fezzan merchants and the struggling communities of the oases. A recent traveller, Major Hanns Vischer,⁴ has compared the present state of the country with the description given by Barth⁵ in the middle of last century. The advance of sand and the shrinkage of oases is everywhere noticeable.

The unfortunate and somewhat precipitate retirement of the Italians from Fezzan on their entry into the Great War threw the country open to hordes of desert tribes who live largely by brigandage and loot. Equally lacking in all sense of honour and courage, they prey upon the broken, spiritless, agricultural communities of the oases. When disappointed of their booty they resort to wanton destruction of wells, palm groves, and carefully irrigated gardens. The reduction of the cultivable areas has been enormously increased by these nomads. The wholesale destruction of the wells and palm groves, on which their very existence depends, has so reduced the settled population that they are unable to offer resistance to the marauding bands. Moreover, they refuse to sink new wells or sow a grain more corn than will suffice their barest needs lest the hard-earned fruits of their labour be seized from them by the hordes of brigands who are ever hovering beyond the horizon. Major Hanns Vischer found that "it is man himself who invites the desert to take possession of the once fertile lands. In the Sahara that man is an Arab or a Tuarek."

And he might have added a Tubbu. If the advance of the desert in Fezzan is to be arrested a strong central authority must be established capable of reducing the nomads to submission, and thereby guaranteeing the security of the agriculturalists. Once this has been achieved much of the lost area may be brought back into cultivation and the oases saved from the ever encroaching sand.

Of the Libyan oases during last century M. Schirmer has written "*la domination des nomades a été funeste aux oasis . . . A Farafrâh, les habitants ne cultivent plus que la portion des terres située au pied même de leurs murailles, car les jardins éloignés sont la proie des Arabes du Barka et des Bedouins du Nil.*"⁶

In the heart of the Sahara lies the rugged and turbulent region of Hagggar or Ahaggar. A mission⁷ despatched in 1904 by the French Government to supplement the work of previous expeditions found in this region abundant evidence of ever increasing aridity and a general decline towards the extreme limit of utter and hopeless desiccation. Besides archæological discoveries indicating the former existence of a higher culture in bygone centuries, much evidence was found of the rapid growth of decay and desolation in quite recent years. In many parts of this region water lies close to the surface, and in certain years actually flows above ground. Wells were found which had but lately fallen into disuse, and there still remained gardens formerly irrigated by surface water from which recent cultivators had been driven by ever increasing aridity. The natives themselves recalled times of comparative prosperity when the tribes were at peace with each other, and wells were more numerous. At the time of their visit the mission found that a section of the Imrads of the Azgueurs were living entirely by pillage at the expense of their neighbours. Where a few cultivators chanced to survive it was found that they grew the minimum of corn necessary to their needs. The Imrads of the Tassili expressed great willingness to return to an agricultural life, provided their crops could be secured against pillage by their predatory neighbours.

The mission reported that at Tarat they found all the conditions necessary for the support of a large sedentary popula-

tion except security against the descents of nomads. The greater part of this region, however, was found to have passed beyond all possibility of redemption. In conclusion Captain Touchard laid emphasis on the necessity for the French to become the undisputed masters of the Tassili of the Azgueurs, who are the principal cause of the reduction of the cultivable areas and encroachment of the desert. The Azgueurs have more recently been brought to subjection and an increase in the agricultural community has since been reported.

It is interesting to note the strangely varied fauna discovered in Haggar. Most of the perennial pools contain fish, and crocodiles survive in more than one district; the presence of antelopes, gazelles, hares, wild cats and moufflon has also been reported. To the south of Temassinin forests of tamarind and ethels barely survive under increasingly adverse conditions. A noted landmark used to be an enormous tamarind tree at Azet in Bangou, which has since fallen a victim to the desert and is now dead.

Fezzan and Haggar are not the only regions of the Sahara which are becoming increasingly arid. There are numerous other districts and oases, the cultivable areas of which are fast shrinking before the encroaching desert. Especially noteworthy is the recently explored Tibesti-Borku region, where Colonel Tilho⁸ has discovered the beds of lakes which have recently dried up. At Tungur, on the Bahr-el-Ghazal, he found abundant evidence of desiccation.⁹ South-west of Haggar there lie the ruins of the old town of Es-Suk (the Market), dating back to the fifteenth century but now half-buried beneath the desert sands.¹⁰ M. Gautier has shown that the part of the Sahara which lies between the Juf and Algeria was fertile in historic times.¹¹ The western frontier of Egypt and the oases of Kufra¹² are said to be suffering from increasing aridity. In the oasis of Insalah, an important military post, the encroachment of the desert is causing anxiety.¹³ These examples might be many times multiplied, but as in all of them we find conditions similar to those already described, we may now turn to the more important matter of the encroachment of the Sahara on the Sudan.

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To the student of desiccation Senegal is a peculiarly attractive region. Interest is chiefly centred in its well-defined river system, which is fast falling a victim to climatic change. M. Henry Hubert,¹⁴ as a result of careful investigation, has brought together some interesting evidence of progressive desiccation in this region. Nearly all the valleys of the numerous rivers which drain the country between the Senegal and Gambia rivers are now dry, and desert conditions are becoming increasingly prevalent. The river Bounoun has dried up within the memory of living natives, whose evidence is substantiated by the account of an early European explorer. The Soloum is dry throughout its course except in its estuary, where the water is more saline than that of the ocean owing to evaporation. In those rivers which are still running there is a marked increase in the salinity of their waters. The early explorers reported fresh water at points where the river water to-day is decidedly salt. Although the total discharge of rivers may not have diminished appreciably, there are indications that their flow is becoming more torrential, which would tend to produce increased aridity in the hinterland. Observation shows that the dry river beds are filling with sand and æolian deposits. Wells sunk by Europeans, as well as those of natives, are drying up. According to native tradition, which is substantiated by the accounts of early European explorers, the country used to be more wooded than it is to-day. This need not necessarily be due to climatic change. The relationship between desiccation and deforestation is a matter to which we will revert later. Of great significance is the fact that shrinking wells and failure of crops is causing the sedentary population of Senegal to migrate southwards to less arid regions. As desert-like conditions become more prevalent the country is gradually invaded by pastoral Moors from the north. Nor is this the only part of the Sudan where nomads from the north are replacing agriculturalists who have been driven southwards in search of more humid conditions.

With regard to failure of crops, M. Emile Roubaud,¹⁵ who was called in to enquire into the decline in the export of ground nuts, the most valuable product of Senegal, found that there has been a continuous fall in the yield of this crop, parallel

with the decline of the rainfall. Although the rainfall records of this region are so limited that little reliance can be placed on their indications M. Roubaud has definitely established the fact that lack of moisture is the real cause of the decreasing yield in ground nuts.

Much of the evidence of desiccation collected by M. H. Hubert in Senegal is consistent with the pulsatory theory of Professor Ellsworth Huntington. A study of the geological deposits of the region has shown that a humid period preceded the present, but that yet again before that there was a period of even greater aridity than we find to-day. The fact that in parts of this region the sand dunes have been fixed by the growth of vegetation has been advanced by some as a proof that more humid conditions are returning. M. Hubert, on the contrary, maintains that Senegal is now entering a period of increased aridity characterised by mobile dunes. A marked tendency in this direction has been observed in the dunes in the neighbourhoods of Dakar and Baol. M. Hubert maintains that the fixing of dunes by vegetation is due to regular periodic rainfall and is only temporary.

Along the Middle Niger a certain amount of fragmentary evidence of desiccation has been collected. Timbuktu affords interesting examples of the effect of æolian deposits. The streets have been raised by sand drifting from the desert to a level much above that of the ancient mosques. During his researches in this region M. de Gironcourt investigated an ancient cemetery of the Askias outside Timbuktu which had been completely covered with sand for a hundred years. Further south at Dia, a very ancient town of the fertile province of Massina, the same investigator brought to light an interesting series of carvings (or drawings) which bear witness to the growth of arid conditions in this area. They represent the district at a time when luxuriant vegetation still grew on the Niger banks in parts which are to-day almost bare. It has been suggested that the formation of Lake Faguibine and the adjoining lakes may be due to desiccation.¹⁶ Lake Faguibine itself is said to be rapidly shrinking. To the east of Timbuktu ruined towns become numerous. The ancient town of Tirekka, of great importance in the time of El Bekri,

after having fallen a victim to the surrounding desert, has recently been re-discovered;¹⁷ of special interest are extensive ruins in the neighbourhood of Gao;¹⁸ further north, in Kidal, more ancient sites are awaiting investigation. The presence of so many ruined sites of ancient towns on this part of the river is not necessarily due to the process of desiccation. This region of the Middle Niger has seen the rise and fall of empires. In its eventful history pillage and destruction constantly recur, and it is small wonder that long periods of turbulence have left an indelible mark on the country. M. Chudeau blames the pastoral Tuarek for the desolation of this once prosperous region.¹⁹ There is evidence that the encroachment of the desert on the region lying to the south of the Bend of the Niger has progressed during recent decades. It has been suggested that the desiccation of these parts may have been partly caused by river capture in the Upper Volta region.²⁰

Passing eastwards into British territory we come to the Northern Provinces of Nigeria, a region of especial interest on account of its abundant resources and the many unsolved problems presented by the strange complexity and varied cultures of its inhabitants. In the closing years of last century, when the northern Anglo-French frontier was first determined, it was not realised how far south desert conditions prevailed. Subsequently, in 1906, the frontier was moved further south to its present position so as to give the French a strip of fertile territory which could afford them easy access to their Lake Chad territory. To-day this frontier may be taken as a rough indication of where the thinly populated pastures and unsettled conditions which characterise the fringes of the Sahara merge into fertile plains supporting an extensive agricultural community. Along this frontier water supply is the limiting factor in the lives of the people. If the desert wastes of the Sahara are encroaching on the fertile plains of the Western Sudan it is naturally on this frontier that we may expect to find dry river beds, shrinking wells, failing crops, and a southward movement among the agriculturalists, all symptoms of desiccation such as we have already noted on the same parallel of latitude in Senegal. This, in fact, is what we do find, but more especially in Sokoto Province, which

extends further north than the other frontier provinces, and is consequently an area in which the effects of increasing aridity are more keenly felt by the natives and less likely to escape the notice of administrative officers.

In 1918 Mr. E. J. Arnett, for some time Resident of Sokoto, wrote of this Province: "It is impossible, in my opinion, to question the reality of the desiccation problem that faces us. Whether we consider merely what we have seen from year to year with our own eyes or examine what has been happening during past decades or past centuries, there are the same processes in action."

As the rainfall records of Sokoto only date back to 1904, any inference drawn from them must be regarded with due suspicion. The average annual rainfall since our occupation in 1902 up to 1918 was 24.87 ins., showing a fairly irregular decline, reaching a minimum of 16.38 ins. in 1913, which resulted in a famine in the following year. The province is regarded as a region of declining rainfall, but it has enjoyed particularly heavy rains during the present year (1920), the total fall for which is awaited with interest. Characteristic of Sokoto are numerous lakes of various sizes which are scattered over the province. During recent years the shrinkage in many of these has become increasingly marked. In this connection we have an interesting note by Mr. H. S. W. Edwardes, of the Political Department: "In the Sokoto Province of Nigeria I found lake formation associated with desiccation in the following manner. Tributaries of the Sokoto river which have ceased to flow have their mouths closed by detritus brought down by the flood of the river, which, in raising its own bed, has barred their valleys. The resulting lake was fed each year by the flood water from the river, and the sediment dropped when the water lost its velocity in the backwater round the bar. . . . Lake Kubiri was perfectly dry owing to the failure of the Sokoto river for many years to reach the level of the bar it had constructed when its water supply was more abundant."²¹ Mr. Edwardes goes on to describe how, by cutting a short canal from up-stream, he was able to restore to Lake Kubiri twelve million cubic feet of water. For the direct benefits to the natives derived therefrom at a com-

paratively infinitesimal cost the present writer is able to vouch. Mr. Edwardes has suggested that the formation of Lake Fagui-bine and its adjoining lakes in the region of Timbuktu may be due to similar causes.

The shrinkage of wells in the northern district of Sokoto has been very marked of recent years and is likely to have far-reaching results. In the drier parts of Godabawa the natives sometimes have to travel with their donkeys as much as twenty miles, there and back, for their daily supply of water. At Sokoto itself the water-level appears to be falling with alarming rapidity, and in 1917 the Resident reported that unless artesian water could be found it was not unlikely that within five years it would be necessary to abandon the government station. In 1826 Clapperton wrote in his diary: "They have not been able to make the date tree grow at Soccato; whenever it gets a little above ground it rots and dies."²² Although the modern date-palms in the neighbourhood of the town do not bear fruit they attain considerable size. The inference is that the date palm has benefited by increasing aridity during the past hundred years.

Of very great significance is the restlessness of the natives. The population, which is mainly agricultural, is very unevenly distributed. In the south there are well-watered areas which are only sparsely inhabited. But in the more arid north, owing to immigration from French territory, every square yard of cultivable land is occupied. As a result of the increasing desiccation of the northern part of the province, as well as beyond the frontier, there is a constant movement from the north to the more spacious areas in the south. Nor is this movement of recent origin. If we examine the historical records of the country we find that there has been in the past a constant migration of tribes southwards, notably the Gobir-awa, a Hausa speaking people who have played an important part in the history of Sokoto, and who came originally from Agades, far north in the Sahara. According to their traditions the country of Aïr enjoyed greater fertility in those days.

Since the British occupation of Sokoto in 1902 the Tuarek (Asbenawa) have begun to encroach on our territory. They

come annually during the dry season in search of pastures for their flocks and herds, returning to their own country at the commencement of the rains. Year by year this seasonal migration has been extended further southward. The endeavours of both the French and British to curb these movements to and fro across the frontier have not met with much success. From the writings of Clapperton and Barth it is evident that before the coming of the French and British the Tuarek frequented Sokoto to a greater extent than they do to-day, and played an important part in the politics of those days. Sometimes we find them fighting on the side of the Fulani and at others lending aid to the Gobirawa. We cannot accept unreservedly as evidence of increasing aridity the fact that during recent years the Tuarek have been pressing further south, for they are only returning to pastures where they were formerly accustomed to graze their flocks and herds. The inference is that the restraint of European military occupation served temporarily to limit seasonal migrations to and fro across the frontier, but increasing desiccation in the north has developed so great a congestion of the population that the migrations are assuming their former proportions to an ever increasing degree.

However doubtful may be the nature and cause of tribal movements in the past, there is incontestible evidence that in Sokoto failure of water supply and decreasing yields of crops are causing a very definite, though gradual, movement southward of the agricultural community of the province. It is only quite recently that this movement has been recognised. Its extent and its ultimate results, supposing the process of desiccation continues, are matters which cannot yet be fully appreciated. That this movement is apt to escape notice is ascribed by Mr. Arnett to two causes. "First, because the population is in layers. Where Habe farmers have been driven out by drought and diminishing yields, the Fulani or Adarawa, with their live stock and lighter methods of agriculture, are glad to take their place. . . Again, when the grazing becomes too poor for the cattle, the Buzai and Tuarek, with their sheep and camels, are pleased to come in. The second cause of this movement escaping notice is that it is so

gradual and never for any great distance at a time. The community does not rise in flight like locusts and arrive *en masse* in a new area. It is rather the continued hopping from field to field, from district to district, devouring all as it goes. . . . The rearguard of the swarm has fortunately not yet reached this province. They are the sedentary Tuarek and Buzai on our northern borders. Beyond them are the nomad Tuarek of the desert."

E. WILLIAM BOVILL.

(To be continued.)

¹ Henri Schirmer. *Le Sahara*, pp. 120-138. Paris, 1893. E. F. Gautier. *Sahara Algérien*, pp. 60-133. Paris, 1908.

² *Bull. Soc. Géol.* 1876. II., p. 135.

³ E. F. Gautier. *Sahara Algérien*. Paris, 1908.

⁴ Hanns Vischer. *Across the Sahara from Tripoli to Bornu*. London, 1910.

⁵ Dr. H. Barth. *Travels and Discoveries in North and Central Africa*. Vol. I. London, 1857.

⁶ Henri Schirmer. *Le Sahara*, p. 303. Paris, 1893.

⁷ Capt. Touchard. *Travaux et Reconnaissances de Pénétration Saharienne*. Paris, 1907.

⁸ Colonel Tilho. *Geographical Journal*, Vol. 56, 1920, p. 169.

⁹ Capt. Tilho. " " " 43, 1914, p. 442.

¹⁰ *Bull. Com. Travaux Historiques*, Tome 29, 1914, p. 10. Capt. A. H. W. Haywood. *Through Timbuctu and Across the Great Sahara*, p. 277. London, 1912.

¹¹ E. F. Gautier. *Sahara Algérien*. Paris, 1908.

¹² Henri Schirmer. *Le Sahara*, p. 307. Paris, 1893.

¹³ Capt. A. H. W. Haywood. *Through Timbuctu and Across the Great Sahara*, p. 317. London, 1912.

¹⁴ Henry Hubert. *Annales de Géographie*, XXVI., 1917, p. 377 *et seq.*

¹⁵ *Annales de Géographie*, XXVI., 1917, p. 231. Emile Roubaud. *Bulletin de Matières Grasses*, July, 1920.

¹⁶ E. F. Gautier. *Sahara Algérien*. Paris, 1908. H. S. W. Edwardes. *Geographical Journal*, Vol. 53, 1919, p. 206.

¹⁷ *Bull. Com. Travaux Historiques*, Tome 29, 1914, p. 132.

¹⁸ *Ibid.* p. 15.

¹⁹ R. Chudeau. *Sahara Soudanais*, p. 244. Paris, 1909.

²⁰ *Annales de Géographie*, May 15th, 1911.

²¹ H. S. W. Edwardes. *Geographical Journal*, Vol. 53, 1919, p. 206.

²² Commander Clapperton. *Journal of a Second Expedition*, p. 219. London, 1829.

THE SEMI-BANTU LANGUAGES OF EASTERN NIGERIA

IN continuing my studies of the Bantu and Semi-Bantu languages with a view to completing those studies as far as possible in a second volume, I was especially desirous of getting all the information possible about the Semi-Bantu tongues of Northern Nigeria, in order to test, and perhaps confirm, the accuracy of Sigismund Koelle's remarkable, though often imperfect, vocabularies written down between 1850 and 1854 from Nigerian slaves landed at Sierra Leone. It was also necessary to extend our knowledge of these Semi-Bantu tongues as much as possible. The Colonial Office and the Governor (Sir Hugh Clifford) of Nigeria sympathised with the object of these researches, and invoked the aid of officials and missionaries in Northern Nigeria for the collection of accurate vocabularies.

So far as I was able to direct their researches, I pointed out that the groups of Semi-Bantu tongues known to exist in Northern Nigeria were the following (proceeding from east to west):—

Group G (S.-B.) of Central Bauchi—the Hill district, north of the Central Benue—represented at present by only one language in several dialects: Jara or Járawa, No. 253 in my list.

Group F (S.-B.) of South-west Bauchi, represented by Burum, No. 252 in my list.

Group E (S.-B.) of the Central Benue basin, north of the Benue, containing, so far as we know, two very little related tongues of Koelle's collecting: Boritsü or Afiteñ (250) and Mbarike (251).

Group D (S.-B.) of the Southern Benue region represented by one language, the Afudu of Koelle (249).

Group C (S.-B.) of the South-west Benue containing the Munzi or Tivi speech (248), and

Group H (S.-B.), the Central Nigerian or Kaduna Valley languages, Gurmana (254), Kamuku (255) and Bása (256).

With regard to Járawa (254), information was sent to me by Mr. J. A. J. Bieneman, of the Nigerian Education Depart-

ment, in time for Vol. I. of my Bantu studies. It amply confirmed Koelle, and filled up the many gaps in his vocabulary. I am now able to publish as an appendix to this article a further vocabulary of Jara, or Járawa (the -wa is probably the Hausa -*awa* or "people" suffix). It is contributed by H. de C. Matthews and E. L. Mort, Nigerian officials. It differs a little from other vocabularies in Vol. I., perhaps dialectically. So far no other Semi-Bantu tongue, distinct from Jara, has been discovered in Central Bauchi. Jara is of great interest to Bantu students, because it contains so many Bantu roots—so many, in fact, that, were not its grammar much worn down and deprived of Bantu features, it might well be rated as a Bantu tongue. Its geographical position in the extreme east of the Niger basin is of importance as indicating that it may have once been a near neighbour of the Bantu mother tongue which pushed its invasions of Central and Southern Africa eastward across the Wele River and the Mountain Nile and into the region of the Great Lakes.

Burum, of which I am able to give for the first time a complete vocabulary furnished to me by Mr. T. L. Suffill, of the Sudan United Mission, was very imperfectly represented in the vocabulary of Vol. I. of my Bantu studies. The words given were derived from a translation of a portion of the Bible by an agent of the British and Foreign Bible Society. Mr. Suffill's vocabulary, fortunately, confirms the general accuracy of my first selection of words, and fills all the gaps. The result is to maintain the character of Burum as a Semi-Bantu speech, and to reveal its slight affinities with the two languages in Group E (S.-B.); but it also shows how much less evident are the affinities with Bantu so prominent in Jara (253). Burum is remarkable for the adoption in its numeration of a duodecimal system, in which it recalls a similar feature in other Nigerian tongues, not Semi-Bantu in character. Personally, however, I think that the word *Ri-kuru* originally stood for "ten," and afterwards, through extraneous influence due to trade, was given the special meaning of "twelve." When this was done new word-combinations were made up for "nine," "ten," and "eleven."

Groups D (S.-B.) and E (S.-B.) still remain tantalisingly

unconfirmed, beyond Koelle's record of them in the early 'fifties. The Nigerian officials have heard rumours of their existence, that they are not extinct, but cannot at present put their fingers on them to produce confirmatory and additional evidence and to fix their geographical position. Mr. Meek (Secretary to the Northern Nigerian Government) thinks that Afudu is spoken in the Nassarawa province north of the Western Benue. But Koelle's geographical indications are in favour of a location immediately south of the Central Benue. Afudu shows some sign of distant affinity with its nearest neighbour, Munsî. It is by no means specially related to Boritsû, or Mbarike, though placed near them by Koelle.

In another direction, we must hope for further elucidation of the Semi-Bantu and Bantu problems. The Mundañ language of Northern Cameroons, of the extreme Upper Benue, would seem from its numerals to be Semi-Bantu with a strong Bantu leaning. But appeals for full information have so far been fruitless. The Semi-Bantu languages of the Kaduna Basin (Group H (S.-B.)) have been further illustrated of late by a full vocabulary of No. 255 (Kamuku). This I shall hope to publish in the JOURNAL when I can accompany it with additional information on other members of the same group. It is sufficient to say at present that the officials who have sent me the vocabulary have collected the tradition that the ancestors of the Gurmana, Kamuku, and Bása tribes lived one or two centuries ago as far north in Hausaland as the 13th parallel of N. latitude. If this is true, it carries back the northward range of the Semi-Bantu languages in Eastern Nigeria to a remarkable extent; interesting to those theorists who believe that the Bantu type of language was formed by the impact on the Negro of some Mediterranean racial and cultural influence; in fact, that the class-prefix-and-concord type of language originated somewhere in the Mediterranean basin and invaded Africa—as so many other things from Europe and West Asia have done. There certainly seems to have been a north-to-south, east-to-west movement of the Semi-Bantu languages of Nigeria. The Munši or Tivi Group C (S.-B.) was reported by Koelle—and the report is confirmed

by much later authorities—to have once been established north of the Benue, and only recently to have taken possession of the region south of that river impinging on the Semi-Bantu of the Upper Cross River.

And another impression that is gaining ground is that Northern and Eastern Nigeria was formerly entirely covered with Semi-Bantu languages which crossed the Lower Niger and spread through the West African coastlands as far west as the Gambia estuary. Many of them became twisted out of recognition by the invasions of Sudanic, Tibu, Nubian, Nilotic, Hamitic, and Sonyai forms of speech. Such theorists are inclined to believe that Hausa, for example, was originally a Semi-Bantu language which two thousand to fifteen hundred years ago was taken in hand by invaders from Egypt or Tripoli and fitted with a Hamitic grammar. It would have arisen similarly to those other trade jargons which in course of time become powerful and widespread languages, such as Swahili, with its strong admixture of Arabic. This in a similar way and at much the same period was created by early Arab intercourse with the east coast of Africa.

VOCABULARIES OF BURUM (252) AND JARAWA (253).

English.	Burum.	Jarawa.
Adze		Dom (= hatchet).
Animal, wild beast	Nyama hei	Nyamsu.
Ant	Nsul	(No collective term).
Ant, white (<i>termite</i>)	Jara, Jei, etc.	Jok.
Ape (Chimpanzee or gorilla)	Kat	Guriya.
Arm	Vwo	Buk.
Arrow	Kwit	Mun.
Aze	Tyem	Dom.
Baboon	Bog'om	Baturun.
Back	Ma	Kinzum.
Banana	(Not grown here Sakwom = <i>wild plantain</i>)	(No word).
Beard	Ngyak	Lir.
Bee	Sok	Ndar, or Nyi.
Belly	Jim	Bum.
Bird	Ninon	Nyel.
Blood	Mi	Kil.
Body	Bek	Yit.
Bone	Kup	Mup.
Borassus palm	(not grown here)	Kang (<i>fan or deleb palm</i>).
Bow	Gbafi	Tak.
Bowels	Laghei	Tut.
Brains	Burun	Kofigalofi mut.
Breast (man's)	Gei	Ki-bur.
Breast (woman's)	Vasal	Ki-ber.

English.	Burum.	Jarawa.
Brother	Gwa	Nyum, Mu-lanji.
Buffalo	Guf-un (<i>bush cow</i>)	Vope, Ndeko.
Bull	Mus	Rongas ndak.
Buttocks	Bulus	Bafigbo, Bwan.
Canoe	(<i>boats not known</i>)	(<i>No word except Hausa</i> "Girigi").
Cat	Salum	Mus (= <i>black</i>), Kusi (= <i>tabby</i>).
Charcoal	Hwalañ	Kal.
Chief, king	Gwom	Ri-añgan, or Rañg.
Child	Hwe	Mun.
Cloth	Rugu	(<i>None except Hausa</i> "Zani").
Cold	Sumal	Polan (= <i>damp cold</i>), Yurr (= <i>dry cold</i>).
Country	Ri-pomo	Zal.
Cow	Nyi	Ndak.
Crocodile	Gutsañ	Gaan.
Day, daylight	Tug, (<i>day</i>), Gasi a i gbei (<i>day-light</i>)	Tañgal.
Devil, evil spirit	Vuvwel	Kwaar.
Doctor (medicine-man)	Voson	Pak-bur, or Rañg-war.
Dog	Vu	Mbo.
Door, doorway	Wriduk	Kunda, Kunja, or Kufika.
Dream	Ngwi	Lot.
Drum	Gbin	Ngwam.
Ear	Toñ (<i>plural</i> : Bitoñ)	Kit.
Egg	Rigi	Ki.
Elephant	Gbin	Zugu, Nzuhu.
Excrement	Vifi	Sip, Mus.
Eye	Ba-yis (<i>plural</i> : Ba-yis)... ..	Kun mus, Kunmut.
Face, forehead	Ba-yis	
Fat, oil	Bwep (<i>fat</i>), Nail (<i>oil</i>)	Mut, Mat, or Mwaia.
Father	Da	Tada, Tat.
Fear	Nyip	Wup.
Finger	Kwenvwo	Mun balabak.
Fire	Kya	Bua, Bâa.
Fish	Tok	Nji.
Foot	Bwol	Kwaat or Kwaar.
Forest	Rihwot (Ri-hwot)	Wur.
Fowl	Coñot (<i>c=ck</i>)	Kat, Kyuk.
Frog, toad	Bot	Dollok.
Ghost	Vuvwel (Vu-vwel)	Kwar.
Girl	Nwon	Muñgalap.
Goat	Vyol	Bil.
Goat (he)	Gam	Daguñg, or Muñgtuñg.
God	Dagwi	Kwöl.
Grandparent	Da dahom	Ka, or Ki.
Grass	Soñ	Kar.
Ground	Vwel	Zaal.
Ground-nut	Yaba	Nja, Nzuk.
Guinea-fowl	Jigin	Gang, Nyar (<i>very nasal</i>).
Gun	(<i>Bindiga, adopted from Hausa and Arabic</i>)	(<i>No word except Hausa</i> "bindiga").
Hair (of head)	Tot	Nyong.
Hand	Vwo	Buk.
Head	Ri-to	Mut.
Heart	Poñ	Njim, Bal.

* Actually derived from the Arabic ex Teutonic Benedig = 'Venice,' because the Venetians in trade really introduced guns to the Arabs.—H.H.J.

English.	Barum.	Jarawa.
Heel	Gifi bwol	Dadugul kwaan.
Hide	Rihwo	Ngup.
Hill	Raku, Rihwol (<i>low hill</i>);	(<i>No word except Hausa</i> "tudu").
Hippopotamus	(<i>Unknown here</i>)	Zagu yam.
Hoe	Ron	Sor, Swar.
Honey	Ngi sok	Ndar.
Horn	Nwefie	Njap.
House	Duk	Ndak'.
Hunger	Vyofi	Zal.
Husband	Rwas	Bit.
Hyena	Murum	Vonourot, Gbun-burr.
Iron	Dyam	Bol.
Island	Rizik	Din.
Ivory	Hwin gbin	Min zugu.
Knee	Rikwot	Kuñgol.
Knife	Ba	Jañgat, Njañga.
Lake	Rep	Ngalagam (= <i>big water</i>).
Leg	Kwörö	Kwokat.
Leopard	Cuei	Nbit.
Lion	Gukum	Nbore.
Lips	Bereg nu	Gup kun.
Magic	Bis	Mons.
Maize	Yaregabas	Gungwaran.
Man	Mwadswi	Bw.
Man, vir	Rwas	Bit.
Meat	Nama, also Namō	Nyam.
Medicine	Hwal	Bur.
Milk	Vasal	Biradam, or Bisin kibur.
Monkey	Jarum	Guria.
Moon, month	Pwel	Lian.
Mother	Neñ (<i>at Forum</i>); De (<i>at Du</i>)...	Ngur.
Mountain	Raku	Tal.
Mouth	Nu	Kun.
Nail (of finger or toe)	Kwogo, Vwo	Kalak buk.
Name	Riza	Lok.
Navel	Hwop	Tong.
Neck, throat	Fwo	Dok, Jañgoñgaloñg.
Night	Bwalak (<i>at Forum</i>); Turug (<i>at Du</i>)	Duk.
Nose	Wol	Dogol.
Ox	Hwiarak	Shaan.
Palm wine, beer	Siriñ (<i>beer</i>)	(<i>No word, or Ngat</i>).
Parrot, Parroquet	Gujei	
Penis	Lasa, Rase	Suk.
Pig	Za	Chim burum.
Pigeon	Gu-murus	(<i>No word except Hausa</i> "tatabara").
Place	Kwon, Dem	Beni, Ban.
Rain	Rwak	Mbul.
Rat	Cu	Nbab, Nguru.
River	Rot	Sal.
Road	Gwofi	Jar.
Salt	Nwasi	Zor, Zam.
Shame	Rikiñ, Rikyñ	Nzun.
Sheep	Vyol pyfi	Nzur.
Shield	Ruga	Toñg.
Shoulder	Sanat	Kworkab.
Sister	Gwa (<i>generally used</i>). Pölgwō	Mun.
Skin	Rihwo	Ngup.

English.		Burum.		Jarawa.
Sky ... ..	...	Lagwi ... ..	...	Kool.
Slave ... ..	...	Sam ... ..	...	Biak.
Sleep ... ..	...	Nwa ... ..	...	Tulu.
Smoke ... ..	...	Kyefi ... ..	...	Dial.
Snake ... ..	...	Gwöm ... ..	...	Yök.
Son, boy ... ..	...	Wen ... ..	...	Bô Mun.
Song ... ..	...	Lwele ... ..	...	Ngel.
Spear ... ..	...	Bare ... ..	...	Kwofig.
Star ... ..	...	Tañacen ... ..	...	Jagag.
Stick ... ..	...	Gwele ... ..	...	Jalañg, Kangañg.
Stone ... ..	...	Fwa ... ..	...	Tal.
Stool ... ..	...	(Not used here) ... ..	...	Buñgul.
Sun ... ..	...	Gwi ... ..	...	Tañgal.
Tail (of an animal)	...	Rum ... ..	...	Ngil.
Tear ... ..	...	Mwişi, Mumsin ... ..	...	Mirum.
Testicles ... ..	...	Ba-tes ... ..	...	Ket.
Thief ... ..	...	Bwik ... ..	...	Ngip.
Thigh ... ..	...	Gwofwa ... ..	...	Sat.
Thing ... ..	...	Pye, Ma ... ..	...	Girr.
Thorn ... ..	...	Erogø ... ..	...	Ji.
Tobacco ... ..	...	Taba ... ..	...	(No word except Hausa "taba").
To-day ... ..	...	Yunuñ ... ..	...	Lina.
Toe ... ..	...	Kwenbwol ... ..	...	Munbala Kwat.
To-morrow ... ..	...	Na Hwol ... ..	...	Lip.
Tongue ... ..	...	Lem ... ..	...	Las.
Tooth ... ..	...	Hwin (<i>plural</i> : Yin) ... ..	...	Min.
Town, village ... ..	...	Ri-pomø ... ..	...	(No word except Hausa "gari"; <i>big town</i> =gala <i>gari</i> ; <i>village</i> =kunbuk <i>ban</i>).
Tree ... ..	...	Cokot ... ..	...	Ngun.
Twins ... ..	...	Sañbya ... ..	...	Ba-pas (<i>plural</i> : <i>cp. Bantu</i> , <i>pasa</i>).
Urine ... ..	...	Nityek ... ..	...	Sangat.
Vein ... ..	...	Gu-rinis (<i>plural</i> : Vi-rinis) ... ..	...	Ngur nyam.
War ... ..	...	Comø ... ..	...	Loh.
Water ... ..	...	Ngi ... ..	...	Yam.
Well, source ... ..	...	Hwiş ... ..	...	(No word except Hausa "rijia," <i>water-hole</i> : or "Kella").
Whiteman ... ..	...	Baturi, Lasara ... ..	...	(No word except Hausa "bature").
Wife ... ..	...	Hwa ... ..	...	Mam.
Wind, air ... ..	...	Gul ... ..	...	Gñig, Guñg or Yurr.
Witch, wizard ... ..	...	Ngarap ... ..	...	Møwas.
Witchcraft ... ..	...	Ngarap ... ..	...	Mofgas.
Woman ... ..	...	Hwa ... ..	...	Mam.
Womb ... ..	...	Jim ... ..	...	Bawi mun.
Wood (firewood) ... ..	...	Cokot Kya ... ..	...	Yoma ñgun.
Yam ... ..	...	Kit ... ..	...	Beakvurr, Bujak.
Year ... ..	...	Sei ... ..	...	Bi-añg.
Yesterday ... ..	...	Na yos ... ..	...	Manu, or Menu.
One ... ..	...	Gw-iniñ ... ..	...	Mok, Dik.
Two ... ..	...	Bi-ba ... ..	...	-rop, Gbari.
Three ... ..	...	Bi-tat ... ..	...	-tat.
Four ... ..	...	Bi-nas ... ..	...	Yin.
Five ... ..	...	Bi-tuñen ... ..	...	-toñgon.
Six ... ..	...	Bi-timin ... ..	...	-toñ salmok.
Seven ... ..	...	Bi-tama ... ..	...	Kestat.

English.	Burum.	Jarawa.
Eight ...	Writ ...	Kešin.
Nine ...	Sa-bi-tat* ...	Kestofigon.
Ten ...	Sa-bi-ba* ...	Lum.
Eleven ...	Sa-gw-iniñ* ...	Lum-ko-mok, Lum-ko-dik.
Twelve ...	Ri-kuru* ...	
Fifteen ...	Rikuru na vei bitat (<i>i.e.</i> , 12+3) ...	Lum-ko-tofigon (<i>fifteen</i>).
Twenty ...	Rikuru ne vei writ (<i>i.e.</i> , 12+8) ...	Lum-gerop, Lum-gbari.
Thirty ...	Rikuru biba na vei bitimin ...	Lum-e-tat.
Forty ...	Rikuru bitat na vei binas ...	Lum-a-jin.
Fifty ...	Rikuru binas na vei biba ...	Lum-a-tofigon.
Hundred ...		Zafigo dik or Zafigo mok.
Thousand ...		Zafigulum.
I, me, my... ...	Ma, me, mi (<i>I & me</i>): hom (<i>my</i>)	Mi, lasu.
Thou, thee, thy ...	Hwo (<i>Thou</i>): Hwo or O (<i>Thou</i>): mo (<i>thy</i>)	Wu, layuna.
He, him, his ...	A, ye, he (<i>he & him</i>): me (<i>his</i>)	Yina, layina.
We, us, our ...	Wod (<i>we & us</i>): mod (<i>our</i>) ...	Suna, lasuna.
Ye, you, your ...	Yin (<i>ye, you</i>): min (<i>your</i>) ...	Wun, lowun.
They, them, their ...	Yen (<i>they and them</i>): men (<i>their</i>)	Iyena, Luyena.
All ...	Mwa ...	Piang.
This, these ...	Womo (sing. and plu. alike) ...	Mimi, bibi.
That, those ...	Woro and Wani (sing. and plu. alike)	Maku, baku.
Bad ...	Vwes ...	Mumbara, Bip.
Black ...	Swi ...	Tonni.
Female ...	Hwa (<i>woman</i>) ...	Sari.
Fierce, sharp, bitter ...	Mešeseš, Berere ...	—, Liep, Dul.
Good ...	Naka, raat, jam ...	Mum, Bwat.
Great ...	Bon, Rei ...	Gul, or Baji.
Little ...	Cerefi ...	Gap.
Long, high, tall ...	Luis, Duk Duk ...	Dalak, Gul.
Male ...	Rwas (<i>man</i>) ...	Rongas.
Old ...	Kop (<i>of persons</i>): Rosomo (<i>of things</i>)	Ganma, Gagas.
Red ...	Sinafi ...	Bafig.
Rotten ...	Boso ...	Rum.
Short ...	Bwit ...	Ndak.
Sick ...	Bwen kanafi ...	Luk.
White ...	Pwefi ...	Pup.
Above, up, on top ...	Erago, la ...	Kit modi.
Before ...	Gyam ...	Dum.
Behind ...	Bama ...	Tokot.
Below, down ...	Nen, tin ...	Zal, Zal.
Far ...	Yigyig ...	Nat.
Here ...	Namo ...	Bimi.
In, inside ...	Ji ...	Mola.
Middle ...	Te ...	Mukit.
Near ...	Bayat ...	Tu.
Outside ...	Menje ...	Inza.
Plenty, many ...	Pyak ...	Iyok, or Gulun.
There ...	Hworo ...	Banako.
Where? ...	Gwa ...	Ke?

* This is the duodecimal numeration in Burum, also met with other neighbouring Nigerian languages. The present forms for 'nine,' 'ten,' and 'eleven' are computed back from 'ten' ('less three,' 'less two,' 'less one'). But I still think *Ri-kuru* originally applied to 'ten.'—H. H. JOHNSTON.

English.	Burum.	Jarawa.
No !	Wai	(No word except Hausa "aa").
Not (with verb as prefix, infix, or suffix)	Sun (<i>prefixed to verb: never as infix or suffix</i>)	Wet (<i>at end of clause in which negative occurs</i>).
To		
„ beat	Wal	Fala.
„ buy, sell	Kur, Kurguluma	Sei (<i>buy</i>), Reo, resel (<i>sell</i>).
„ come	Yu	Vei.
„ cut	Kapi	Yet, yere, Tare, te, Vugus.
„ dance	Bin	Ra rei.
„ die	Wu	Ku.
„ eat	Li	Ri.
„ give	Fa	Noñ.
„ go	Bir	Ki.
„ kill	Wul	Moro.
„ know	Dal	Tog.
„ laugh	Nwal	Sagas.
„ leave off, cease	Sik, or Mun (<i>really no vowel = M'n</i>)	Tig.
„ love, want	Vet	Simi, simo.
„ see	Sun	Di.
„ sit, remain, abide	Nak, or Rak	Sañal.
„ sleep	Tulu (<i>Noñgtulu = to lie down asleep</i>)	Wanwva.
„ stand, stop, be erect	Jam = <i>stand, stop</i> ; Lok = <i>get up</i>	Tumal.
„ steal	Ngip	Sigi.

Since this material was sent to press I have received further vocabularies from Northern Nigeria. These illustrate (besides a hitherto unknown, non-Bantu language of Bauchi) the Kaduna group of Semi-Bantu tongues—Gurmani, Kamuku, and Bása (Nos. 252, 255, and 256 in my list). Bása (256) has never been written down since Koelle's vocabulary of 1852 (from a slave at Sierra Leone). This new vocabulary of Bása is therefore peculiarly interesting, as it once more confirms Koelle's accuracy. Bása is nearly related to Gurmani, and the new vocabulary confirms its "Semi-Bantu" character. I hope to publish these new vocabularies in the JOURNAL.

H. H. JOHNSTON.

SKETCH OF ELGEYO LAW AND CUSTOM

THE following brief sketch of Elgeyo law and custom, as obtained from their elders, notably Kimêniñg Arap Cherene, Chemitei Arap Purkarik, and Kipkulei Arap Burtai, may be of interest, although it is very far from complete, and in places inaccuracies doubtless have occurred.

" Chiefs."

The first fact to be remembered is that the Elgeyo have no " Chiefs " in the ordinary sense of that word. This will not surprise anyone who is familiar with East African natives. Exactly the same system prevails as obtains amongst the Suk. The same word for " Chief " is used, viz., Ki-ruwek-in, the translation of which is an " adviser." There is no hereditary office. A " Kiruwekin " is chosen informally by general consensus of opinion, including curiously that of women, either on account of his ability, wealth, or both. His influence depends on his personality. As may be expected, there is, or rather was, an " orkoiyot," or chief medicine man, but the Elgeyo appear to have almost entirely relied on the Nandi " orkoiyot."

They say that they can only remember one Elgeyo who held this position, that his name was Chepsiya, and that he died without a successor. This, however, may not necessarily be true.

Native Council (Kôkwet or Ka-Kiruwo).

This signifies a meeting of elders beneath a " tree," as is the custom with most East African tribes, whether Bantu or " Nilotic " (*e.g.*, A-Kikuyu and Suk). Here disputes are held by a concourse of elders, who subsequently give their decision. Public spirit and tribal *esprit de corps* are responsible for the carrying out of whatever is decided upon by the elders. An

understanding of the patriarchal system makes this instantly intelligible.

Oaths and Ceremonies of that Nature.

These are chiefly in the nature of "ordeals," and are of far more importance to the native than "evidence." Indeed, they, or the threat of them, are generally essential, even if supplementary to "evidence."

A.—Ordinary Oaths.

Four spears, with their heads in the air, are planted in the ground in a row facing four other spears similarly placed. The accused or defendant (all criminal law is more or less civil) is stripped naked and passes once between the two rows, the while saying, "If I lie I shall never see the new green grass spring up."

The same process is, if necessary, repeated with the other party to the suit.

(This oath will bear a comparison to that of the Hill Suk, who occupy the same escarpment further north beyond the Maragwet and Endo.)

B.—A More Serious Oath, at which the Uncircumcised Must not be Present.

A path is marked out by the old men, "whose hair has begun to turn white." The accused or accuser, or both, as the case may be, must pass once along this path carrying on his head a whetstone (koi), at the same time saying, "Should I be lying I shall have no profit or fortune in my dwelling; I shall obtain no property; and if I have a wife she will be childless; and I shall live solitary all my days." (It need hardly be stated that the value of these oaths consists in the fact that the superstitious native believes in their efficacy and is disinclined to take the risk.)

C.—Oath in Regard to Disputes as to Live Stock.

If a man claims an ox, cow, sheep, or goat which is in the possession of some other who denies his claim, the man who

is in actual possession will slit the ears of the disputed animal, so that it runs about madly sprinkling the blood around on the ground.

Then the claimant, if he is not afraid to do so, will take it. Should, however, his claim have been false, he or one of his family will, within three to six months, die suddenly without warning. This is regarded as proof, and the animal will be returned to its original owner.

D.—Ceremony in Regard to Clan Quarrel.

When two parties have come to blows, the elders will endeavour to bring about a settlement. Should, however, they be not satisfied that the settlement is a lasting one, they will bring a dog to the Kôkwa (kôkwet with the definite article). An old man and a young man chosen from each party will take hold of either end of the unfortunate dog, which will then be cut in two halves.

Each party then takes half the dog with half its entrails, and carries it to a place where there is one of the cracks or fissures in the earth (which are frequently made in these parts by the heavy rains), throws them in, and covers them up with earth. It is believed that should the parties, after the ceremony, again come to blows, all of those who are the first to recommence the fighting "will return to their homes no more."

E.—Ceremony in Regard to Inter-Tribal Quarrels.

Should there be hostilities between two tribes (e.g., the Elgeyo and the Kamasia), a final peace is ratified in the following manner:—

The elders of both tribes meet together on the boundary, slay a goat and eat it. A long sinew is then extracted from the animal's foreleg, and representatives of both tribes will hold on to either end of it. The sinew is then cut in half, and each side departs with half.

It is believed that the tribe which breaks the peace after this solemn ceremony will be defeated, and have no success in their undertaking.

F.—Oath in Regard to Stolen Stock (i.e., when a man is accused of stealing an animal belonging to his neighbour and eating it).

If suspicion falls upon a certain individual who denies the theft, a pit is dug, into which are put stones covered with blood drawn from the neck of an ox. The suspected man who has denied the theft is then compelled to fill up the hole himself.

Should he have in reality stolen the animal, his body will shortly swell up to an enormous size. It is then obvious that he is the thief, and the man from whom the animal was stolen will be recompensed at his expense.

When he has begun to swell, he will doubtless confess to the elders, whereupon they will open the hole and rub the stones with palm wine and sheep's fat. The thief will then recover his normal size.

Murder and Homicide.

Murder and Intentional Homicide.

The family of the murdered man are at liberty to burn his house and to slaughter and devour his live stock.

In addition to this, the elders will fine him 37 goats (which he must obtain as best he can if his other property has already been consumed by the avengers). These are to be given to the murdered man's relations. If the murderer has cattle he must give a cow to the murdered man's mother—a symbol "that she may bear another child to replace the lost one."

Unintentional Homicide.

A minimum fine of five goats to the deceased's family is imposed, but no liberty to that family to behave as in the case of murder.

Assault.

He who has committed the assault must keep the man he has assaulted in his house, and feed him on whatever he wants until he is well.

When the patient has completely recovered, his quondam

opponent must slay a cow in calf, or an ox, or three goats, which the elders will devour. This is to deter him from such behaviour in the future.

(To slay a cow in calf is an action which in ordinary circumstances would be inconceivable. This punishment is particularly chosen, in order to impress upon the offender the consequences of his action.)

Witchcraft.

If a man is suspected of having caused the death of another by means of witchcraft, the elders will take some of his property—say, his garment, or one of his ornaments—to the “orkoiyot,” who tells by its smell whether the owner is or is not the “penin” (wizard).

Should the “orkoiyot” proclaim him guilty, his own brother is ordered to hang him, under penalty of forfeiture of all his property.

If a man is proved guilty of having bewitched cattle or sheep or goats, the punishment is confiscation of all his property, burning of his house, and banishment from the country.

(Witchcraft cases require careful watching, and statements of the elders to the effect that such things are of the past, and now taken no notice of, must be accepted with great reserve. The responsibility put upon the family for the punishment of one of its guilty members is common amongst these hill tribes, and is remarkable.)

Theft or Robbery.

In the case of a minor, a fine of one goat is imposed. For an adult there is a maximum fine of five goats for each person participating in the theft.

(Thefts are regarded lightly, not necessarily because theft is a minor offence in itself, but because Elgeyo custom appears to know nothing beyond the theft of one animal. They also consider the extenuating circumstances, viz., that the offender “was hungry.” This really argues a natural honesty on the part of the people, which proximity to civilisation is perhaps tending to destroy.)

Slander.

The elders call each man in turn, and ask him from whom he heard the slander, until they arrive at its originator, whom supposing no actual harm has arisen as a result of the slander, they fine one cow. If harm has resulted, the fine is increased to two or three cows. These are eaten by the elders. Cows are chosen for the same reason as in the case of assault, viz., to impress on the offender the consequences of his guilt. There is, however, another kind of slander which entails banishment and confiscation of all the offender's property, and that is such slander which, by being uttered to a woman, results in the upsetting of domestic happiness and ruin of the home (an extraordinarily sound rule).

Land Tenure.

This is a complicated and interesting subject, on the subject of which no more is attempted here than to record a few of the most important principles.

Land is said to have been divided up many generations ago, and the boundaries marked out with stones. But the manner in which it was originally done is unknown. Owing to fear of foes, the land at the top of the escarpment was never divided out, and has no owners. Plots are inherited by the children, and it is the business of the eldest son of the first wife to make the division. When frequent subdivision has made the plot too small to be divided further, the eldest son will keep it all and buy up other plots for his brothers from poor men.

Such poor men may have brothers also; in which case they must divide with them the proceeds of the sale.

The irrigation ditches (kabecheffg), as with the agricultural Suk and Endo, are a tribal affair. The young men are given three days' notice in which to be present to work upon them. Refusal entails the fine of a goat. If anyone is ill he must send his sister. This work being for the general benefit of the tribe, no payment is made.

There is, however, an interesting custom whereby the elders can order the young men to work for certain periods

on the plot of an old man who has no labour. Refusal again entails the fine of a sheep, but as the work is for the benefit of an individual, and not for the tribe, the old man is compelled to pay the labourers. This payment is made in honey.

(In this last custom we find compulsory labour, though it is paid for. If enlarged upon it would, in the case of Elgeyo at any rate, almost appear to justify a parallel for which we need not go far to seek.)

Inheritance.

In case of the death of the male head of the family, the eldest son of the deceased's first wife has the dividing of the property, but the division is superintended by the elders of the same "age-clan" as the deceased.

The eldest son inherits more than the second, the second more than the third, and so on, but all must inherit something.

The girls do not inherit anything, but an ox is slaughtered to give them a consolation feast.

If the first wife dies, her *youngest son* has the division of her property. This he divides as he wills, trying to please everyone. The eldest son, however, in this case can claim nothing. The girls, again, get nothing, except an ox wherewith to make a feast.

A woman only obtains property from her husband (*vide* under "Marriage").

The same procedure obtains in the case of the death of the second, third, or other wives.

If the woman has no children, her property returns to her husband, whence it originally came.

Land is divided as already stated.

Marriage.

There are three periods necessary to complete a marriage.

1. When a man demands a girl he must produce sufficient Mwimbi (Eleusine grain) to make eight jars of wine (*i.e.*, two men's loads).

2. The preliminaries being settled, on a certain day the man takes the girl to live with him. On this occasion he

produces eight calabashes of wine and two of milk (the latter is, of course, symbolical). The girl lives with him in a probationary state for twelve months.

3. *If at the end of a maximum of twelve months, she becomes pregnant*, then, and not till then, is the marriage made complete by the third ceremony.

This consists in a feast and the presentation of two female goats, one which has borne a kid and one which has not yet done so, to the mother of the bride.

The marriage is now complete, and nothing whatever can dissolve it, nor is there any such thing as divorce. If, after this third ceremony, the woman runs away, she is fetched back, and she may be beaten. No one will receive her. There can be no second marriage for her. This one is final and indissoluble.

The husband cannot break the chain any more than can the wife. Indeed, he cannot refuse to house her under penalty of banishment and confiscation of all his property.

It must be mentioned here that this final ceremony of marriage is the only time at which a woman acquires property. She stands at the door of her hut whilst the bridegroom drives past his stock in the direction of the kraal which has been made for her. She is supposed to consider his means, and when what she considers a fair marriage portion has been driven past, she exclaims, "Enough."

Apparently there is seldom any disagreement as to the amount necessary. If they cannot agree, the bridegroom sometimes promises her more in instalments. But the bride is at liberty to break off the contract if not satisfied. On the woman's death, the property goes to the males, as described before.

Consequently property cannot be accumulated by females. The question of adultery must now be considered.

As stated before, when once the marriage is completed, it is indissoluble. If another man takes the full-wife (i.e., one who is pregnant or has borne a child), he is at once proscribed by the tribe. Anyone can take any of his property with impunity. If, however, she runs away or is abducted by

another man during the second or probationary period, she must also be returned.

The semi-husband will have no connection with her until it is clear from her "periods" that she has not become pregnant by the man who abducted her.

If she was pregnant before she was abducted, there is no more to be said; but if it is made clear that she has become pregnant by her abductor during her absence, the original man, "not wanting another's child," will hand her over to the abductor by whom she is pregnant, and the whole contract is dissolved.

Nor has the first man any remedy by native law, it being considered that his expenses in the matter have been taken out in pleasure, and in the work which the woman has done for him up to the time of her running away.

MERVYN W. H. BEECH.

NOTES ON THE TURKANA TRIBE OF BRITISH EAST AFRICA

PART II.

Occupation and Pursuits.—The chief occupation of the Turkana is the herding of stock, and, it may be added, the acquiring of it by fair means or foul. They own large herds and flocks of camels, cattle, donkeys, sheep, and goats; are expert stockmen, and know more of animal disease than human. The extreme scarcity of water, which has to be ladled by skin buckets and wooden troughs from water holes and wells, gives enormous work, which, with the paucity of grazing, adds impetus to a desire to move further south. As much stock is probably lost by starvation as by disease. Camels, a recent acquisition, are prized and not used as baggage animals.

The grazing of cattle is done by men and youths, the watering mainly by women.

Women's work is the collection of edible berries in times of scarcity, milking, cooking, rough hut building, and the dressing of skins.

Raiding cattle from their neighbours may be described as an occupation, which has brought much trouble upon the tribe. Youths and men between 15 and 50 years take part, and instances are recorded of women accompanying the raids, presumably to herd the captured cattle. They raid on a large scale, and generally do not spare women or children, though captives are taken. Passwords are used, and probably change with each raid; the standing Turkana challenge is: (question) *Tirigol?* (The Turkwell River?) (Answer) *Lo'moton* (In the bush).

A great deal of time at night is spent in dancing. The dances are:—

1. *Akimurmur*. This is of two kinds :

a. Before a raid bullocks are killed and eaten to ensure its success. Women and girls form outside the circle of men, join hands, indulge in obscene posturing, and taunt the raiders to a frenzy.

b. A man desiring to make a feast collects his friends, hands are clasped, the dancers move in circles, various animals, as the giraffe, are imitated. The dance is one of thanksgiving.

The same dance is found with the Jie, Dodoso, Karamojo, and Suk, under the same name; the Acholi have animal dances.

2. *Adonga*. This is a deliberate exercise; young men and girls meet and jump up and down in a rigid fashion, keeping remarkable time, the youths boasting of their prize bullocks. (*Vide* Sir H. Johnston, *The Uganda Protectorate*, p. 852.)

The same dance and name is found with the tribes mentioned above.

3. *Jiumo*. This is danced at the end of the scanty rains, and is of lines of men and women jumping and circling around each other. Clappers of wood are beaten.

This dance is found with the other tribes; the Suk call it *Ny'elat*.

Musical instruments do not seem to be found with the tribe. A form of single-stick (two sticks are used, one as a shield) is played; at this the Turkana are adepts. Two intricate forms of the universal African board game are played, different from the Bantu and Hamito-Semitic forms. Hunting is practically confined to the *Ng'abotok* Turkana, and to the very poor of other sections. Animals are speared and trapped. Traps are of three kinds: the ordinary sapling and noose, the game pit, and a circular trap from which spokes go inwards but do not meet, leaving a small circle; the size is adapted for elephants downwards. The animal treads on the trap, which is placed over a hole; the trap is forced up the leg, and is attached by ropes of rhinoceros or other hide to a large log which impedes the animal's movements in the bush until it can be despatched.

Arts and Crafts.—Iron work does not seem to be known, and spears and axes are purchased, mainly from the Jie, who obtain them from the Acholi, and also from the Suk when friendly. Skins are dressed for wear. Honey barrels are made from logs. Pillow stools are very accurately carved and made. Coarse pots are made for cooking. Natural gourds are used for milk, and also an oval wooden goblet which will not stand up, but, as the gourd, packs conveniently in the wicker donkey panniers. The women do intricate bead work. Hairdressing and exaggerated cattle branding might be described as pictorial.

Food.—The Turkana subsist mainly on meat, blood, and milk, of which they drink large quantities; certain parts of the animal eaten are the portion of the women, old and young men, and children. In times of scarcity edible berries are eaten. Game, small mammals (especially by children), and even donkeys are eaten; crocodiles but rarely; fish and land tortoises are used, and also monkeys. There is no prohibition against eating dead animals; in short, the diet is regulated by the circumstances of the person.

Millet and plants of the marrow variety are sometimes cultivated; meat is dried and beaten into a powder; tobacco is highly prized, both for chewing and snuff, and that grown by the Hill Suk preferred. The fruit of Dom palm (*Hyphaene Thebaica*) is pounded into a meal. Millet beer and honey mead are used. They are not a drunken race. The hide, when not required, is cut up with the meat. Cattle urine is mixed with milk for digestive reasons.

* * * * *

Organisation.—The Turkana is very much a law to himself. The only authority is the "witch doctor," who rather confines his functions to advice as to the success of raids, grazing, and migrations. Count Teleki states that the Turkana have two of these. The camels are the sphere of the senior, the cattle, sheep, and goats the junior. There is reason to think that the father and son combine these functions, but it is not certain, and it cannot be argued that the office is hereditary. There is also a little evidence to state that the daughter of the present "Stock Adviser" dreams

dreams. This functionary is known as the *Emuron*; he is not in contact with administration. It has been stated that the Turkana have a War Chief; the present aspirant has no following, other than a gang of desperadoes, and is not a tribal functionary.

The Turkana divide into two, mainly geographical, sections :—

1. The *Ny'issir*, from *essir*, smartness in dress, which subdivide into :—

a. The *Ny'emonia*, from *emoni*, bush.

b. The *Ny'eseto*.

c. The *Mboicheros*, from *eboroichu*, dirty, said to refer to their villages; they are poverty-stricken, and live on fish and Dom palm meal on Lake Rudolf.

d. The *Lisiga*, from *isiga*, slightly built.

2. The *Ng'ebellai*, from *ebela*, the curved sharp stick weapon carried by the Turkana, which subdivide into :—

a. *Ng'olio*, from *ng'olia* (pl.), fish.

b. *Ng'otonia*.

Both the above have an admixture of Samburu blood.

c. *Ng'ataicha*, from *etaicha*, a form of game trap.

d. *Ng'amatak*, from *emathi*, I drink, a reference to their more plentiful supply of water.

The *Ny'eseto* and *Ng'amatak* have largely become independent of their sections.

Two other sections are found, the *Ng'atom*, from *atom*, an elephant, and also a rifle, who have practically become a separate tribe near the Sudan-Abyssinian frontier; and the *Ng'abotok*, poor cultivators and hunters, somewhat localised near the Turkwell Gorge, of which each section has its complement.

The Turkana social divisions are :—

1. *Ng'abanak*, boys under 15 years.

2. *Ng'esurok*, youths 15 to 20 years.

3. *Ng'iliok*, warriors 20 to 60 years.

Subdividing into :—

- a. *Ng'walemongin*, 21 to 30 years.
- b. *Ng'echedomesiken*, 30 to 35 years.
- c. *Ng'oiyaren*, 35 to 40 years.
- d. *Ng'etera*, 40 to 45 years.
- e. *Ng'mergwara*, 45 to 50 years.
- f. *Ng'erowi*, 50 to 60 years.

- 4. *Ng'kasiko*, men over 60 years.

These social divisions have been compiled by Mr. S. O. V. Hodge, and re-spelt.

The first and last do not accompany raids; the second as helpers, herds, and the like. Iron wire rings worn around the neck apparently mark the stages of manhood.

Women's social divisions are :—

- 1. *Ng'abethe*, girls.
- 2. *Ng'ateruk*, brides.
- 3. *Ng'abero*, wives.
- 4. *Ng'akima*, old women.

Pregnancy before marriage is not uncommon, "illegitimate" children follow the mother, not the father, as the Suk; the young men and girls do not live together.

Totemism.—There is a system of totemistic ages, *athapan*, which are not cyclic, as with the Suk, and are separate from the totemistic clans. Many of the designations for these ages are found with the Karamoja.

These ages are :—

- 1. *Ng'isiguru*, thorns.
- 2. *Ng'echomin*, baboons, which were not killed or the skins worn save with this age's permission.
- 3. *Ng'adogoi*, monkeys, as above.
- 4. *Ng'echelebuth*, white stones. Members might dispossess others of these to sit upon.
- 5. *Ng'irionomor*, pure black oxen. Assent sought before slaughter by others.
- 6. *Ng'ethamuketh*, unmuddled hair. Absence of muddled coiffure resented in others.
- 7. *Ng'ababanga*, ducks. Permission from these to kill.

8. *Ng'ebuterok*, bush pigs, as above.

9. *Ng'ematheth*, locusts, as above.

10. *Uwabeto*, eland, as above. This age has a right to black stones to sit upon.

11. *Ng'echonodethekin*, lame sheep. Permission from these to kill.

12. *Ng'ebelakwa*, broken spear shafts. This age when spearing oxen for food break the haft of the spear used.

13. *Ng'irisai*, leopards. Permission to kill from these, and also to kill elephants and hedgehogs.

14. *Ng'etabene*, guinea fowl. Permission to kill from these.

15. *Ng'angabwerin*, standing water. Other ages should not smear themselves with the mud.

16. *Ng'emerichada*, serval cats. Permission to kill from these.

17. *Uwalanya*, reeds, the plumes of which this age would appropriate for ornament.

18. *Ng'inamowie*, hut-burners, the mischievous youths of the present age (1920).

These ages are consecutive. There are forgotten ages previous to the first; a few *Ng'abuterok* are said to be living, which is scarcely possible. Ages are usually associated with circumcision, which the Turkana do not follow. The totemistic taboos are not rigid, and often eluded; the relationship of a man to his age and its totem is as loose as that of the English youth to a football club. When youths consider their age should be named, they collect bullocks, call upon the elders, make a feast, and request a certain name, which is passed on throughout the Turkana sections with some bickering as to the exact designation of the age.

There is a system of totemistic clans which may not intermarry or cohabit. The father's clan is followed by both males and females; captives take the clan of the captor. Many of these totemistic clans (*Ng'atergerin*) are found amongst the Karamojo. They are :—

1. *Ng'atogok*, a sloe-like berry (Swahili, *Mkunasi*). This tree may not be cut save by members, who also may not eat or touch the Lesser Kudu.

2. *Ng'elelet*, running water. The originator was carried

away by a flood—a rare occurrence. The clan may not eat or touch Grant's (? Robertsii, Brightsii, Petersii) gazelle.

3. *Ng'eduyia*, old cows. This clan may not eat the heart, lungs, liver, kidneys, entrails, etc., of oxen.

4. *Ng'etarobokolon*, suns, from a person who died of sun-stroke. Totem animal unknown.

5. *Ng'egoria*, the striped. This clan shave their children's heads in stripes, and brand their cattle in the same fashion. They may not drink blood.

6. *Ng'etangor*, the striped field-rats. They do not kill or eat this rat, and endeavour to prevent others.

7. *Ng'ekonom*, fire-makers. They are said to be able to make a fire burn by their presence. They may not pick up articles found.

8. *Ng'atab*, porridge. They may not look into the pots to gauge the porridge, nor eat porridge so estimated, under pain of blindness.

9. *Ng'ebonga*, a certain wild fruit. This may not be eaten by these under fear of death from internal stoppage.

10. *Ng'araruk*, the toothless. These may not eat the heads of any animals.

11. *Ng'ebuicho*, ?

This list is probably not complete. The clan totems are more rigid than the age totems; husband and wife do not appear to call each other by the name of the clan, as with the Suk. Cattle are branded according to the clan.

Names.—Children receive names shortly after birth from the mother; these are generally of animals or objects, as ostrich, mosquito, beetle. Youths and men often take the name of their best bull or bullock, or a name implying the fashion into which its horns have been trained, as with the Jie, Dodoso, Karamojo, and Suk. A successful homicide may give rise to a new name, ending in *moi* or *moi* affixed to the original name, as with the tribes above. A man is not called "son of —" when directly or indirectly mentioned, as with the Masai and Nandi.

Religion.—No trace of a religion or future state has been noted; a word for a Supreme Being, *Akuich*, is given, but there is no further idea, and the word also means "above."

There is a word for ghosts, *sorai*, said to be white wraiths with black hair; this word was formerly used to denote Europeans. No deity is invoked in oaths, which are generally obscene. Formal oaths or peace-making is by the presentation of white ostrich feathers by each of the tribes; or by the cutting in two of, it is said, a live donkey or dog; or by walking over spears laid with their points together. Quarter is asked by proffering grass, and evidence of truth given by putting dust to the lips. No oath can be considered unbreakable. These customs are found with the other tribes.

Psychology.—The Turkana is generally loyal to his tribe and section, and at present disloyal to Europeans engaged in administration. He has not a fanatic contempt of death, is a brave fighter when necessary, and does not expose himself to danger unnecessarily. In raids and homicides he does not spare women or children, arguing that the woman is the mother of the child and the child the parent of the man. He does not exhibit any great cunning or forethought in his lies. He is quarrelsome and sulky. He is bold and adventurous, indifferent to fatigue and suffering. He is moderately generous when rich, and extremely grasping when poor. He has little or no tribal organisation to guide him; he has an indomitable spirit, and quite probably when it has become possible to gain the tribal confidence his negative qualities will become positive, and he will develop as a stockman and trained soldier, and justify the sneaking regard most Europeans have for his manhood and virility.

JUXON BARTON.

THE FULAS AND THEIR LANGUAGE

THE book under review is, as a grammar of South-eastern Fulfulde, excellent, clear and simple in its setting forth, and likely to be of much practical use to Europeans in Northern Nigeria wishing to acquire some elementary knowledge of how to speak the Fula tongue intelligently and intelligibly and how to understand it when spoken. But there are points in it, in the prefatory part, which I feel bound to criticise.

Firstly as to the orthography. It is a pity that the author, instead of following one or other of the systems already in vogue since the 'fifties for transcribing "Fula" (this, by the bye, is the best generic term to adopt for the people and their language) should go out of his way to devise an orthography of his own which has nothing to recommend it. The attempt to discriminate between the "voiceless" and the "voiced" consonants—*d*, *b*, *s*, *t*—is pedantic and unnecessary. His "voiced" *k* is the Arabic ك, and is always rendered by *q* in British, French, German and American philology. His "voiced" *r* is more probably the Arabic ر, which we transliterate by the Greek gamma (γ), and his "voiced" *w* and *y* are those consonants preceded by an aspirate. No single letter like ñ is used for the nasal consonant which he transcribes as *ng*; and this is misleading because in its use the *g* is not sounded separately. Personally, I cannot understand why in writing African languages the orthography employed by me in my works on the Bantu and Semi-Bantu tongues is not nowadays universally employed. It is not of my own invention, but represents a reconciliation of the older British, German, Austrian, French and United States orthographies.

Then, as regards the name for this very important West

¹ *A First Grammar of the Adamawa Dialect of the Fulani Language (Fulfulde)* by F. W. Taylor, M.A., The Clarendon Press, Oxford, 1921. Price 10s. 6d.

African people. The general term "Fula" seems to me the best, though the author thinks it "not pretty." Why? The actual root-word is *Pul-* in the singular and *Ful-* in the plural, to which are added reduplication as in *Fulfulde*, the general name for the language, and the characteristic suffixes (which play in Fula the part of the Bantu prefixes) *-o*, *-be*, and *-de*. *Pul-o* is a Fula person, *Ful-be* the Fula race or people, and *Ful-ful-de* the language. But the Arab, Berber and Hausa rendering of the word is "*Fulan*," "*Fulani*." The Bornu, Kanuri and Tubbu people know them as "*Fellata*," and in Senegal the race name is usually pronounced *Peul*, and in that form, with an unnecessary *h* at the end, it has been adopted by the French authorities. In Sierra Leone, and I think by the Mandingo peoples, they are usually called "Fula," and that, I believe—though Mr. Taylor does not—is the best generic term for European literature, *Ful* being rather insubstantial as a word.

The author contributes a historical sketch of the Fula—ideas as to their origin and their racial affinities, and the relationship of their language. He is, I fear, a little influenced (as missionary writers used to be half-a-century ago) by a desire to lean on Old Testament ethnography. A vague mention of a people called *Pul* or *Phut* in Isaiah and Ezekiel seems to him to justify the supposition that the original Fula came from Western Asia, crossed Egypt, and settled in West or West Central Africa. He also quotes the traditional account of Fula origins written down in 1824 by one of the ruling clan of Fulas, who more than a hundred years ago conquered the present Fula Empire over what we term Northern Nigeria. This is worthless, as worthless as are almost all speculations in ethnology and ethnography by Muslim writers because (like the early Jews and the Christians with the Old Testament) they are too much influenced by their sacred book the Koran, and in addition want to affiliate all the races of Africa with the honoured Arabs.

What are the facts about the Fulas, so far as we have any to go by in forming theories? That they are found purest in race in the hilly or mountainous districts of Senegambia, in westernmost Africa. Yet it must also be admitted that colonies

of cattle-herding Fula of pure type were located in Borgu (west of the lower Niger, north of Yoruba), and even as far east as Mandara (south of the Lake Chad region) by the early European explorers of the nineteenth century. Still the Fula physical type—tall, elegantly built, yellow or reddish skinned, with ringletted hair, not tightly curled, handsome, aquiline-nosed—is, or was, found most abundantly in Senegambia. I have seen them myself in Portuguese Guinea, coming to trade at the coast markets; an unforgettable experience, so strikingly different were they from the surrounding Negroes. The Western Fulas had hazy traditions of having come down from the north, from the Senegal coast region. Colonel Louis Binger, the great French explorer, wrote most interestingly on Fula origins some years ago in *L'Afrique Française*. He adduces slight but not negligible linguistic evidence to show that the Fulas may have been inhabiting the Atlantic Coast region between the Senegal and the Draa in Carthaginian times, and have furnished guides or interpreters to Hanno on his celebrated voyage to Sierra Leone. Certain French writers have developed a theory—but the evidences for it escape my memory—that the Fulas represent the semi-white race which occupied North Africa in Neolithic times and was driven thence westward and southward by the invasions of Hamites, Libyans and Iberians from Egypt and from Spain in pre-historic times; and that the Fula type of language (perhaps, even, with other “class” languages, parents of the Bantu and Semi-Bantu) was the form of speech which preceded in North Africa the Libyan-Hamitic tongues.

The existing Fula colonies in Darfur are probably not much more than two centuries old, if indeed they preceded the Fula Empire in Nigeria. But the agricultural or cattle-keeping Fula colonies in Mandara and Borgu are difficult to explain, unless we believe, like the author of this book, that they are relics of an ancient migration of the Fulas from Egypt to the Western Sudan. Some have gone so far as to suggest that the Fula are the outcome of the expulsion of the Hyksos invaders of Egypt. Certainly, so far as physical type is concerned, the Fulas of pure race recall rather the Arab of middle

and south Arabia than the hairy Libyan¹ (so very like a South European) or the comparatively hairless Hamite. Certainly, though exhibiting great similarity in culture, the Fulas do not resemble bodily that other cattle-keeping aristocracy of East Central Africa, the Ba-hima or Ba-tusi. Then again there have been the theories—slightly discredited, I know not why—of Lieut. Desplagnes that the Fulas travelled gradually across the Sahara Desert from North Africa and settled first along the Western and Upper Niger, where afterwards arose the great Fula kingdom of Masina. This has seemed to me the most likely of all the theories, since it would explain how in early times they may have penetrated up the Niger to its sources and to the comparatively cool mountain regions of Senegambia; or on the other hand have crossed the Upper Volta Basin and settled in Borgu (west of the Lower Niger).

As to their rather isolated type of language they may have brought it with them, and cognate forms from the Mediterranean may have originated the Bantu in the Northern Sudan [Semi-Bantu tongues can be traced to 13° N. latitude in Northern Nigeria]; or they may have lost their former Mediterranean speech and have adopted a Negro language from the women of inner West Africa, with whom they certainly intermingled to some extent, though they may afterwards have developed pride of race and eschewed sexual intercourse with the black peoples (to resume it again when they became a conquering people). The nearest relations of Fula speech at the present day lie with the Teme, Moshi, and other languages of the Northern Gold Coast territories, though there is some resemblance in grammar and word-roots also with the Wolof of Senegal. In syntax and structure, and even very slightly in word-roots, there are affinities with the Bantu, indicated very well in Carl Meinhof's writings. To class Fula in any way with the Hamitic family is monstrously misleading, though it is an error to be found in many superficial writings on African philology. Not a single shred of evidence can be brought forward to support any such idea. An Austrian philologist writing in the 'seventies attempted a classification

¹ I refer to body hair.

of African speech-families, and by the time he reached Fula he was so weary of his task that he arbitrarily lumped it with the wholly dissimilar Nuba family of South-West Egypt and the Eastern Sudan. Whether aboriginal Fula coming from the Mediterranean greatly influenced the languages of the Negro tribes of Inner and Western Nigeria, or whether when the Fula immigrants entered the bend of the Niger they adopted a Negro tongue cannot as yet be determined. But this at any rate is clear, that at the present day the affinities of Fulfulde lie with the Negro speech-forms of West Africa, and in addition with the Bantu family.

There is no more interesting problem in African ethnology than the origin and relationships of the Fula people and of their language. Unfortunately, as regards the people, they are generally fanatical Muhammadans—especially in the west—and amongst other things tabu photography or are shy of being photographed or measured. So that we possess only very poor statistics or photographic representations of their physique from which to draw conclusions as to race relationships; while as regards language and archæology, much further research must be made in inner West Africa. The Fula seem destined to be the ruling race, the aristocracy of Eastern Nigeria.

H. H. JOHNSTON.

DINNER OF THE SOCIETY

A DINNER of the African Society was held in honour of the newly-elected President of the Society, the Earl Buxton, G.C.M.G., on Tuesday, March 15th, 1921, at 8 p.m., at the Connaught Rooms, Great Queen Street.

Earl Buxton occupied the chair, and at the conclusion of the Dinner delivered his Presidential address, which will be found on page 161.

Amongst the large number present were :—

Mr. J. W. Allen, Lt.-Col. L. S. Amery, M.P., Mr. H. Kelway Bamber, M.V.O., Mrs. Kelway Bamber, Sir Otto Belt, K.C.M.G., Sir Reginald Blankenburg, K.B.E., C.M.G., Lt.-Col. W. G. F. Barnard, D.S.O., Miss Biggs, the Countess Buxton, G.B.E., Lady Buxton, Sir T. Fowell Buxton, Bart., Miss L. V. Buxton, Mr. Rupert Buxton, Mr. Albert Cartwright, Dr. J. B. Christopherson, C.B.E., Mrs. Christopherson, Sir R. Elliott-Cooper, K.C.B., Mrs. Elliott-Cooper, Sir George Denton, K.C.M.G., Sir Howard d'Egville, K.B.E., Miss Alice d'Egville, Mr. John Dunn, Mrs. Dunn, Mrs. Gordon Fisher, M.B.E., Capt. Gordon Fisher, Lady Doreen Fitzroy, Mr. H. Wilson Fox, M.P., the Hon. Mrs. Wilson Fox, C.B.E., Sir Francis Fuller, K.B.E., C.M.G., Lady Fuller, Sir Henry L. Galway, K.C.M.G., D.S.O., Major C. S. Goldman, the Hon. Mrs. Goldman, Miss Goldman, Sir W. Brandford Griffith, Major Byam Grounds, Mr. J. H. Harris, Mrs. Harris, Dr. W. M. Hewetson, Mr. G. C. Hutchinson, Mrs. Hutchinson, Sir Harry H. Johnston, G.C.M.G., K.C.B., D.Sc., Mr. T. B. Kitson, Major Geoffrey Lane, Mrs. Lane, Mr. D. O. Malcolm, Mrs. Wyndham Merewether, Miss Mitchell, Mr. G. W. Neville, Mr. G. J. E. Neville, Mr. Reginald Newham, Lt.-Col. J. J. O'Sullivan, D.S.O., Mrs. O'Sullivan, the Hon. Doris Peel, Mr. L. N. Peregrine, Mrs. Peregrine, Sir Owen Philipps, M.P., G.C.M.G., Lady Phyllis Ponsonby, Mr. H. Kemp Prosser, Mrs. Kemp Prosser, Lt.-Col. W. T. Prout, Mr. Victor Raulier, Miss D. Rogers, Sir E. Denison Ross, C.I.E., Ph.D., Lady Denison Ross, Miss M. Sylvester Samuel, Mr. Lewis A. Smart, Mr. Percy Early-Smith, Mr. E. de Stein, the Hon. Mrs. Talbot, Capt. F. W. Taylor, Mrs. Taylor, Miss M. A. Thomas, Sir Lawrence A. Wallace, K.B.E., C.M.G., Mr. Leo Weinthal, O.B.E., Mrs. Weinthal, Lt.-Col. Godfrey D. White, M.P., Sir Harry F. Wilson, K.C.M.G., Lady Wilson, Sir Reginald Wingate, G.C.B., G.C.V.O., Lady Wingate, and Mrs. H. Wood.

Sir George Fiddes, G.C.M.G. (Permanent Under-Secretary of State for the Colonies), Major Sir Humphry Leggett, D.S.O., Lady Leggett, and Sir Frederick and Lady Macmillan were, at the last moment, unavoidably prevented through illness from being present.

At the conclusion of the address,

Lieutenant-Colonel L. S. Amery, M.P. (Under-Secretary of State for the Colonies), in proposing the health of the new President, said :—

My task to-night is that of proposing the health of your guest, the new President of the African Society. I think the Society may reckon itself fortunate in having as its new President a statesman of such wide experience and such intimate knowledge of one part at least of the great African problem, a part which throws its light upon every other part, and more particularly on the problem of the relation of the white man with the black man from one end of Africa to the other. Lord Buxton has had a long and distinguished career at home and in connection with the Dominion of South Africa. There was a time, it seems very remote now, when he was in the forefront of active fighting politics. Even then he was noted for an impartiality that is not often found in our politicians. I remember my very first attempt to deal with politics was very materially assisted by Lord Buxton. It was my first effort to speak at the Harrow School Debating Society on a subject of which I knew nothing. Somebody said that Mr. Sydney Buxton had put both sides of every political question in a little book. I picked it up, and found that he had given both the Tory and Liberal sides of the case. I took the former. My adversary had also got hold of the book, and took the latter. Such was Lord Buxton's impartiality in argument, or such was the mental deficiency of Harrow schoolboys, that the arguments with which he supplied me easily beat his own side.

Lord Buxton became first associated with the problems of Africa when, nearly thirty years ago, he held the position of Under-Secretary of State for the Colonies. It throws an interesting light upon the immense progress of Africa in our time to think how remote those days seem from the Africa of to-day. Those were days when the Uitlander problem was just beginning in the Transvaal, when in what is now Rhodesia the first little band of pioneers were beginning to settle down, the days when the first pioneers, men of a past age from the point of view of Africa, though still living amongst us, men like Sir F. Lugard and Sir H. Johnston, were just carving out what are now the great regions of the British Empire of East and West Africa—days when, on the edge of the desert, Lord Kitchener's Chief Intelligence Officer, Sir R. Wingate, was busily getting all the information required for the Khalifa's overthrow. Judged not by years, but by the advance, Lord Buxton's experience goes almost back—shall I say?—to the Palæozoic period in African history. That period was followed by a

Mesozoic period in his own life—a period of immersion in party politics and home administration.

But after that came, later, but by no means least important, that very fruitful and active period of his life which has been concerned with the history of South Africa in the last seven years. He arrived in the opening months of the great crisis, and through all the difficulties and stress of that crisis Lord Buxton's partnership with that great statesman, General Botha, played a great and enduring part in the destinies of South Africa and the Empire. Our President succeeded in dealing with problems not only of great perplexity, but of great difficulty, in a way which was of inestimable service to the Empire and to the true interest of South Africa during one of the most anxious periods of its history. That period is now past. South Africa has safely ridden through the storm and has come out not only an integral part of the Empire, but prepared for a greater and more prosperous future. Her development from the material side is bound, I believe, to be a great one. I believe South Africa is destined fully to hold her own with the other great Dominions in the development of her resources to build up her strength and prosperity for future generations. But, as our Chairman has reminded us, she has now to face great internal problems. The old quarrel of the two white races is, after all, a very small issue compared with the larger one of the relations of the white to the black. Difference between the whites means disaster to the position of the white man, and also, I believe, disaster to the black man himself.

I know, there are two schools, as Lord Buxton said, with regard to the true duty of the white race towards other races, towards the inhabitants of Africa. There are those who regard the black man as something between an interesting kind of fauna which must, at all costs, be preserved intact in its primitive condition, and a duke whose vested interests must never be disturbed. On the other hand, there are those who fail to recognise that the black man is a human being and has capacities for developing like ourselves. I believe that our task is to bring out the best qualities in him and to make him more fitted to play his part in the building up of the civilisation of the world. But I am also one of those who believe, and I think Lord Buxton expressed the same belief, that in the long run the contact of white with black is for the black man's good. Undoubtedly in the first there may be instances of injustice. The peace and other advantages which we bring to subject races are often accompanied by the introduction of many undesirable things. But I believe that, in the long run, the tradition of freedom and responsibility which goes with British institutions, wherever they may be planted, cannot co-exist side by side with a purely servile population. The sense of responsibility in Englishmen and in all who are partners in these institutions is bound in the long run to tell them that these institutions must be shared with all who live in the same country. Therefore, I am confident that, however great the difficulties, the problem of the relationship of the black and the European in South Africa will be solved on lines of the progressive

extension of freedom and the extension of rights and liberties which will not be to the detriment or exclusion of the white man, but which will aim at both living side by side on terms of mutual respect.

The problem that faces South Africa, where there is a large white population one-fifth or one-sixth that of the black, is repeated in somewhat different form in Rhodesia, where the population is less, but which is still a "white man's country." Further north still, East Africa is a white man's country only in this sense, that in patches of it the white man finds conditions of climate which enable him to make his home in a social, economic, and political sense. But that is enough to afford an actual basis and starting-point for the white civilisation to operate and influence the native, not through mere sojourners, but through men living on the spot. In West Africa it is different, where the white man is only there as a merchant or administrator. Still, from one length of Africa to another, the problem for the coming era is how that relationship between white civilisation and the native is to be solved. The war has hastened on these things at a tremendous rate. It has transformed South Africa. It has transformed the whole map of Africa. And when the history of the war comes to be written—from the British point of view, at any rate—in the distant future, by far the most important result will be, not the changes in the map of Europe, but those in the map of the world. Out of the war there have emerged two great new entities in the British sphere, British East Africa and the British Middle East, with which the Secretary of State for the Colonies is at this moment dealing. This fact will in time to come be regarded as a more important issue of the war than almost any other. I believe that a hundred years hence it will be known as the war which created British East Africa and the British Middle East far more than the war in which this or that change was made in the ever-shifting kaleidoscope of European frontiers. All these things make the work of this Society more interesting and important, and it is fortunate, when so many developments of such interest are taking place, in having as President a statesman with such peculiar knowledge and such practical experience.

Lord Buxton in reply said :—

I certainly do not intend to inflict another speech upon you, but, if Colonel Amery will allow me, I would like to thank him for his personal references to myself. I greatly appreciate what he said, and I listened with deep interest to his hopeful view in regard to the future. There are too many pessimists about, and it is good to find an optimist. He has been kind enough to refer to my period of office in South Africa. If I was fortunate enough to be able to do anything there, it was due to two causes.

It is said of a Governor and Governor-General that what is required is, in the first place, that the wife of the Governor-General or Governor should be someone who will get on with the people; and, secondly, that he must have a good Staff.

Well, I was very fortunate in my Staff, and singularly fortunate in my wife and two daughters, who are here to-night.

Till recently I was also extraordinarily fortunate in the statesmen with whom I had the great advantage and satisfaction to deal. In General Botha and General Smuts we have two men of very remarkable characteristics, and men who were statesmen in the truest and deepest sense of the term. It was also a great advantage to me to have had to deal with men like Sir Thomas Smartt, Leader of the Unionists, with Mr. Cresswell, Leader of the Labour Party, and with General Hertzog, Leader of the Nationalists, from whom I have always received the utmost courtesy.

I agree with Colonel Amery in looking upon the future of South Africa with great hope. South Africa has always in the past had her difficulties, her ups and downs; she will have in the future other difficulties and further ups and downs. But one advantage of the late election is that we can look to the fact that for four or five years there will be in existence a Parliament in which General Smuts and his United African Party will possess a very substantial majority.

South Africa has suffered too much from the instability of Governments. There is now a stable Government in office, and we are sure that South Africa will benefit from it.

I thank you for the way in which you have responded to the toast of my health. It is to me a high honour to be President of the African Society.

EDITORIAL NOTES

THE recent General Election in South Africa, by which the South African Party, under the leadership of General Smuts, secured a majority of twenty-two seats over every possible hostile combination, is an historic event of an importance extending far beyond the geographical limits of South Africa. General Smuts appealed to the electors on one definite issue. Was the Union to become an isolated, self-centred Republic, or was it to consolidate the position it had won as a partner in the greater union of the British Empire? The answer of the electors left no doubt as to the intention of the majority of the voters. The number of seats held by the Nationalist party, which would make South Africa a Republic, remained practically unchanged (indeed the votes cast for the Nationalists were greater than in the 1920 election), but the fact that one Independent and ten Labour seats were transferred to the South African Party indicates unmistakably that electors were prepared to sink minor interests in the face of the great issue that was placed before them.

It is a circumstance of the greatest importance that the leading opponent of the point of view for which General Hertzog and his Nationalist followers stand is himself a man who, as did General Hertzog himself, fought gallantly against Britain in the South African War. Were it otherwise—were the leader of the South African Party not himself a Boer—it might look to the outside world as if the British Empire, octopus-like, were trying to absorb the Dutch element in South Africa against its will. General Smuts, however, who has won recognition as one of the leading statesmen of the day, realises that the old Afrikaner ideal of isolation is no longer either possible or desirable. The world, as he expresses it, now travels by aeroplane and express train. He shows that

one of the chief lessons of the Great War is that nations are mutually dependent, and he, more than any other living man, has raised South Africa from the position of a group of colonies to that of a nation—not a subject nation, but a free partner in the great brotherhood of nations that make up the British Empire..

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THE War and its aftermath have done much to distract men's minds from the great schemes conceived by Cecil Rhodes for the development of the African Continent. Before his death he urged Mr. Robert Williams, the chairman of the **Tanganyika Concessions Company**, not to lose sight of his project to connect the Cape with Cairo by rail.

At the last annual meeting of the Tanganyika Concessions Company Mr. Williams referred to this promise, and showed what the Company is indirectly doing in this direction. The mineral wealth of the Katanga area acted as a magnet to draw the railway northwards from Matabeleland. Mineral wealth, said Mr. Williams, is always found on the watersheds of great river systems. It was reasonable to hope, therefore, that minerals would be found on the Nile-Congo watershed, as they had been found on the Congo-Zambesi watershed. If so found, they would, like the Katanga minerals, enormously help in the development of the Cape-to-Cairo Railway. During the past year the Tanganyika Concessions Company has acquired large interests in the Nile-Congo Divide Syndicate, which has an eighty per cent. share in certain mineral rights—metal, minerals, precious stones and oil—in that part of the Sudan in which the Nile-Congo watershed is situated.

Meanwhile, companies affiliated to the Tanganyika Concessions Company are steadily carrying on the work that will bear fruit when the Benguela Railway is completed, an event which will put the Cape in railway communication with Lobito Bay, and materially shorten the journey between Cape Town and London. The Union Minière Company, in spite of great labour and transport difficulties, has, during the last five years, averaged an output of well over twenty thousand

tons of copper. Down to August of last year 272 tons of cassiterite had been extracted. The present production is 50 tons a month, and, it is expected, will shortly be raised to 80 tons. Coal, suitable for locomotives, has been discovered close to the Katanga Railway, south of Bukama, on the River Lualaba, to which point the railway has now reached. Construction on the Benguela Railway has been held up during the last year, but improvements have been made to the work already done, and a re-survey with the object of shortening the route has been made as far as the Congo State frontier.

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AMONG the bitter disappointments of reconstruction after the War was the comparative failure of the scheme to settle ex-soldiers on the land in Kenya Colony. The blame of the failure is attributable rather to the force of circumstances than to official blunders. The work of the Land Department had fallen so hopelessly in arrears during the War that when ex-soldiers arrived, eager to take up the land assigned to them, some of the areas granted could not immediately be located, and others, after location, were discovered for one reason or another to be useless. Undeterred by the difficulties that confronted land-settlement a band of ex-soldiers, seventy-five in number, under the name of the Disabled Officers' Colony, went into partnership. Each took a six hundred pound interest, of which five-sixths has been paid up.

About a year ago the colony began work, cautiously and on a modest scale. Pioneer members established themselves at different parts of the twenty-five thousand acres that had been granted to the colony, built temporary huts and started to clear, plough and plant the land. At that stage of the work only a small proportion of the members of the colony could be usefully employed. Others found temporary private employment until the colony should have developed sufficiently to find work for them. Already the colony grows its own vegetables, provides its members with dairy-produce, and rears its own pigs and poultry. A saw-mill and a workshop for the repair of tools and agricultural implements are at work. Two hundred acres are under flax, and a smaller

amount of land under coffee. A flax-mill, to be driven by water-power, is being built. Members of the colony undertake the work for which they are best adapted—agricultural, industrial, or clerical. While most members who are working for the colony live on the land itself, some live at the nearest railway station, to act as receiving and forwarding agents for the materials bought by the colony, and, ultimately, for its produce. Others are engaged in labour recruiting. Eighteen are being trained in flax-factories in Ireland, and some are still in private employment, waiting until the colony is able to absorb them.

The colony is controlled by a committee, composed of the heads of departments, but though, as is inevitable, it is the duty of some to give and some to receive orders, the colony has so far adopted the principles of Communism that each active member receives the same salary, and each will receive an equal share of the profits. No member, by virtue of his position on the colony-committee or as the head of a department, receives more pay, or will receive more profits, than any other member.

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IN the debate on the Address Mr. Lloyd George declared that the Government is not prepared to adopt the Milner Report, or even accept its recommendations, until they have had a conference with the Egyptian ministers who, so far, have not been officially consulted on the matter. He added that he would like, if possible, to consult representatives of the Dominions before coming to a decision. Conference with Egyptian ministers and Dominion representatives will be a lengthy business, and meanwhile various representative Egyptians have explicitly stated that Egypt has never admitted that she forms part of the British Empire, and that nothing short of complete independence will satisfy national aspirations. Telegrams to this effect have been received in London from medical men, lawyers, health-officials, students, and even from the "New Woman" Society of Cairo. There is no expression of opinion, however, from the Fellaheen who make up 92 per cent. of the population. It has been decided on the principle

of self-determination. that no Power may rule a country against the wishes of its inhabitants, but to ascertain the wishes of all its people, and to establish a form of government in accordance with those wishes, as a preparation for handing over the reins of authority, is not so simple in practice as it may appear in theory.

The case of Mesopotamia affords an admirable illustration. (See the recently issued White Paper, *Review of the Civil Administration in Mesopotamia*.) At the Armistice the principle of self-determination was enunciated, and the inhabitants of Mesopotamia were invited to express their views as to the form of government they desired. The bulk of the population, peasant-agriculturists and fishermen, who really had most to gain by a good government, and most to lose by a bad one, had no views whatever on the subject. The nomads of the desert were indifferent as to the form of government so long as it did not interfere with the ancient and lucrative trade of highway robbery. Many country shaikhs desired a government that would not levy taxes, and the inhabitants of the towns considered that the taxes should be borne by the country people. Men who had been in the employment of the ex-Turkish Government desired a return to the old *régime*, with its tolerance of inefficiency, idleness and bribery. More reasonable elements of the population wished for government by an Arab Emir, but could not agree as to whether the Emir should be chosen from the Shi'ah or from the Sunni sect, and finally, the Jews, Christians, and a fair number of enlightened shaikhs, who had realised the material benefits of British administration, desired unrestricted British rule in which there should be no Arab element whatever.

Though Egypt has a larger Christian element than Mesopotamia, the two countries have much in common. Both have a small element of intellectuals who, by virtue of superior education, are able to attract more attention than their numerical importance warrants, and both have a very large proportion of illiterate and inarticulate peasants, to whose prosperity good government is vital. Great Britain might win the applause of political theorists by abandoning the

control of Egypt on terms that would please the Nationalist Party, but it is by no means sure that by so doing she would act in the best interests of more than a small minority of the population.

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EIGHTEEN months ago the Admiralty sought information
Cameroons or as to the name that should be given to what
Kamerun. had previously been called Walfisch Bay.

The question gave rise to a conference at which the Admiralty, War Office, other Government Departments, and the Royal Geographical Society were represented, as a result of which it was decided to form "A Permanent Committee on Geographical Place Names." In the *Journal of the Royal Geographical Society* Major-General Lord Gleichen gives an account of the Committee's work. A series of rules for British official use for the spelling of geographical names has been drawn up, together with a standard alphabet applicable to thirty-two languages, including Arabic and Amharic. Believing it to be important to arrive at an agreement as to the spelling of names in ex-enemy territory for which Great Britain has a mandate, before these become crystallised in wrong forms, the Committee has settled the spelling of a large number of place-names in Tanganyika Territory, Cameroons, and Togoland. This will be a great advantage to the average man, but a blow to those who sometimes obtain a certain spurious reputation for scholarship by devising a spelling for a foreign name that has not hitherto been thought of.

* * * * *

THE Administration Report (1920) of the Railways of
The Uganda Uganda and East Africa tells a tale of work
Railway. done in the face of many obstacles. The
 past year has been a difficult one. Members of the staff whose leave was long overdue have had, for their health's sake, to take it, with the result that their places have been temporarily filled by less experienced men, and the whole staff has had to work overtime. The delay of factories in delivering goods requisitioned has made it impossible to keep rolling-stock and steamers in a thoroughly efficient condition. A rush of

settlers on the land has resulted in the carriage of more bulky goods, such as agricultural machinery, than existing facilities in the way of cranes, ramps, and sidings could adequately cope with. An exceptionally low lake-level has impeded water-communication. Taking all things into consideration, especially the great increase in prices, it is not surprising that the railway's profits for the year 1919-1920 were the smallest since 1906.

The employment of natives as locomotive drivers, stokers, machine-tenders, and artisans in the railway workshops has, on the whole, proved satisfactory, though they show a tendency, when granted leave, to absent themselves in their villages till they have forgotten much of what they learnt. Of twenty-three native learners who passed through the Telegraph Training School, only four proved failures. The others, after a training extending on an average over five months, are now employed as railway signalmen. A comparative table of imported articles shows an increase in all manufactured articles necessary to the development of the country. There is a marked decrease in the import of food-stuffs, a loss to the railways, but, nevertheless, a good sign so far as the Colony as a whole is concerned. The report does not make it clear whether the decrease in liquor imported is due to the fact that the railway has a soda-water factory at Nairobi, or whether it should be attributed to the good example of the United States of America and the earnest pleadings of Mr. Pussyfoot Johnson. Added to the report are a hundred and forty-four pages of accounts and statistical tables, somewhat indigestible to the ordinary reader. From these, one curious item of information appears, of more interest, perhaps, to naturalists than to statisticians. Why is it that of all the wild animals in the country through which the railway passes, only giraffes have been rash enough to get in the way of the trains?

* * * * *

La Società Agricola Italo-Somala, a company that owes its
 Italian origin largely to the Duke of the Abruzzi,
 Africa. has been formed, with a capital of twenty
 million lire, to develop the resources of Southern Somaliland.

Sixteen thousand hectares have been acquired on the Webi Shebeli. The land is said to be rich, and at present produces luxuriant pasture and heavy crops of *dhurra* and other native grains. It is the intention of the Society to supersede the present primitive methods of agriculture, and to introduce the cultivation of the sugar-cane and other tropical products. The factors which, in the opinion of the Society, make for success are excellence of soil, facilities for irrigation, the possibility of improved communications, and the healthiness of the climate. Malaria is said to be mild in form and limited to small areas, and dysentery, typhoid, and sunstroke are unknown.

An Italian mining engineer, Signor Carlo Crocco, reports the discovery of an extensive copper-field fifteen kilometres from Jebel Sraya, in Tunisia. Samples of the ore have been assayed, and have yielded:—Copper 34.70 per cent., antimony 16.80 per cent., arsenic 2.85 per cent., iron 7.50 per cent., and lead 1 per cent.

* * * * *

National Congress of British West Africa. LORD MILNER, in a reply dated January 26th declining to accede to the petition of the National Congress of British West Africa, stated that he had received from the Governors of Nigeria and the Gold Coast information which showed that the Congress was in no way representative of the native communities on behalf of whom it purported to speak.

In his Address to the Nigerian Council on December 29th, 1920, Sir Hugh Clifford gave his reasons for refusing to regard the Congress as in any way national or representative. British West Africa, he said, is composed of many nationalities, as widely different in outlook as are the Scandinavian and the Slav. In degrees of culture they are even more diversified. The so-called representative of Nigeria, who came to England on personal business that had nothing to do with the Congress, has not been authorised by anybody in Nigeria to represent Nigerian opinion, and was apparently co-opted to the Congress by the other members. Sir Hugh Clifford also stated that the telegram in which he expressed his per-

sonal good wishes to the Congress had unjustifiably been used as evidence of his official recognition of its representatives.

* * * * *

THE January number of *L'Afrique Française* contains an interesting article by M. Antonetti, the **French African Railway Development**. Governor of the Ivory Coast, on the effect that the Ivory Coast railways have had, and will have, on the commerce of the French Sudan.

Until the French conquest of Senegal the only outlet for the trade of what is now the French Sudan was northwards across the Sahara, the dense forests that lay to the south of it cutting off all communication in that direction. When the French occupied Senegal Sudanese trade was diverted westwards. The distance between the Sudan and the sea was thus reduced from four thousand to two thousand miles, but transport was still difficult. With the driving of a railway through the hitherto impenetrable forests between the Sudan and the Ivory Coast, the distance was reduced to six hundred miles. The French Sudan was then practically divided into two portions: the area which is drained by the Upper Senegal and Upper Niger continued to send its trade westwards, while the area drained by the Upper Volta found an outlet to the south. The possibilities of this opening-up of the Sudan are enormous. The inhabitants of the Ivory Coasts and the forests to the north of it badly need meat. They now have access to the Sudanese stock-markets. The Ivory Coast has great natural wealth, but lacks labour. The Upper Volta has little wealth, but is densely populated. Railway connection between the two will thus enormously benefit both districts.

* * * * *

A HUNDRED years ago—on March 19th last—was born a man destined to become one of the greatest figures in the history of African exploration. In 1854, on behalf of the Indian Government, Sir Richard Burton explored Somaliland. At the outset he had the assistance of Speke and two other officers, but the most dangerous and difficult part of the journey, including a visit to Harra, was accomplished alone at great peril to his life. In 1856,

accompanied by Speke as a subordinate, he set out on what was the great quest of his day, the search for the sources of the Nile. In 1858 he and Speke discovered Tanganyika; then Burton fell ill and allowed Speke to continue the search alone. Speke discovered Victoria Nyanza, hurried home and, being on the spot, received for the discovery much of the fame to which Burton was entitled. The years of 1861-5 Burton spent in West Africa. Officially British Consul at Fernando Po, he undertook a mission to the King of Dahomey, and travelled extensively in Benin, the Cameroons and the Gold Coast.

Important though Burton's African journeys proved, they were but incidents in a wonderful and variegated life. They entitle him to a place among the great explorers of the 19th century, but he would have achieved fame had he never set foot in Africa. A dozen of his contemporaries did as much, or more, for geographical exploration, but as an explorer into the minds of the backward races with whom he came in contact Burton stands unequalled. He was, perhaps, the greatest practical linguist that England ever produced, and as an anthropologist in the field his position is unique amongst all civilised nations.

That Burton never received the material reward to which his work entitled him, is due partly to accident, partly to his own disdain of it—honour, not honours, was his goal—and partly to the fact that those in whose hands lay the giving of rewards were unable to appreciate the greatness of his contribution to human knowledge. In temperament, if not in blood, he had something of the gypsy. He was happier keeping a provision shop in an Oriental bazaar, or obtaining access to the interiors of Moslem houses in the guise of a pedlar, than being lionised in English drawing-rooms. His manner amongst people of his own race was not ingratiating. He had an unbounded contempt for smugness and, in an era that was inclined to make a fetish of respectability, his frankness, outspokenness, disregard of convention, and vivid interest in the most disreputable sides of Oriental life, stood in the way of promotion and emoluments. He concealed a kindly nature under a disguise of almost brutal roughness. His literary style was as rugged as himself—so much so that few can read

his books without occasional reference to an English dictionary. On this account, and because his greatest work is quite unsuited to promiscuous circulation, his books are better known to students than to the general public. The enormous mass of curious knowledge contained in them is still but partially explored, and it is hardly rash to prophesy that his fame has not yet reached its zenith.

* * * * *

THE issues of the *Times* of March 5th, 7th, and 8th contain

**A New Woman
Explorer.**

a skeleton account of a remarkable journey in the Libyan Desert made by Mrs. Rosita Forbes. Starting from Benghazi in Cyrenaica, she travelled southwards by camel-caravan to the headquarters of the Senussi sect, now located in the Kufra Oasis, which had never before been visited by Europeans, except in 1879 by Rohlfs and Stecker. From Kufra she returned to Alexandria by way of Jarabub and Siwa, a route that had never previously been traversed by any European. Mrs. Forbes was extremely fortunate in that when she embarked on her journey Sidi Idriss, the Senussi sheikh, had just ratified an agreement with Italy and, being anxious also to cultivate good relations with Britain, granted her protection. She had, however, to pass through the territory of the fanatical Zawia, who had their own views on the desirability of admitting foreigners to their country. Even though she passed as a Moslem and was fortified with the protection of Sidi Idriss, she went in danger of death at their hands, and on one occasion saved her life only by a midnight flight and at the cost of the abandonment of the bulk of her loads. The mere fact that she carried scientific instruments was enough to imperil her life, but she not only carried them, hidden in the folds of her voluminous Arab cloak, but used them, and actually succeeded in taking photographs of sacred places by letting the lens of her camera appear through a hole in her garment. In addition to the perils of death at the hands of fanatics, Mrs. Forbes had to face the dangers incidental to travel in the Libyan Desert. Twice her caravan lost its way in the sand, and once it did not reach water till the camels were nearly exhausted and the water-supply perilously reduced.

BOOKS REVIEWED

Travel in South Africa. Publicity Department, South African Railways and Harbours. Johannesburg. 1921.

THE aim of this brochure is to interest those who can afford to travel in the attractions that South Africa possesses for the tourist. Printed on good paper, and adorned with many excellent photographs and sketches, it is admirably adapted to entice those who have never seen South Africa, and to lure back those who have known it but have left it. The tedious *minutiæ* of the ordinary guide-book are omitted, and an attempt is made, generally with success, to give a general impression of South Africa's charm. Writing, as the author necessarily does, to attract the largest possible number of readers, it would be unkind to jeer at him because, after an eloquent rhapsody on a Zambezi sunset, he continues: "And so to dinner! The *cuisine* (at the Victoria Falls Hotel) was good." But surely, in the chapter on the romance of the diamond fields, he should have made some reference to the I.D.B. industry? "There is nothing spectacular about the Karroo" is a statement so flagrantly unjust that one wonders whether the writer, while his train was passing through the Karu, allowed his attention to be diverted by the charms of poker! As in the Painted Desert of Arizona, so in the Karu, the peculiar aridity of the air causes a wonderful succession of brilliant atmospheric effects. The author's libel on the Karu is all the more curious in that he quotes (but with reference to sunset on the Zambezi) from a poem of Rudyard Kipling's, *Bridge-Guard in the Karroo*, which has these particular atmospheric effects for its subject:—

"Royal the pageant closes,
Lit by the last of the sun,
Opal and ashes of roses,
Cinnamon, umber, and dun."

As Kimberley is incorrectly spoken of as being on the edge of the Karu, perhaps the writer confounds the Karu Desert with the monotonous grassy flats that lie to the south of the Diamond City. There is a touch of apparently uncon-

scious humour in the chapter on Zimbabwe. The author divides the theories as to the antiquity of the ruins into those of the ancient and the mediæval schools. After declaring that he makes no attempt to judge between these, he states the case for the mediæval school, and forthwith pulls it to pieces with great vigour and ability. The chapter on the *Voor-trekkers* is so excellent, so marked with sympathy and insight, that one regrets ignorance of the author's name.

* * * * *

Farming Opportunities in the Union of South Africa. Publicity Department, South African Railways and Harbours. Johannesburg. 1919.

WE have recently seen an advertisement issued by a South African Company having fruit-land to sell, that promised to investors such splendid returns under such ideal conditions for so small an outlay of capital and labour, that it seemed wonderful that anybody in South Africa could be found to carry on industries less attractive than fruit-farming. To such circulars this book affords an effective antidote. Its purpose is to attract farmers to South Africa without giving any too sanguine a presentation of the possibilities of success. Its object is specified in the preface:—

“To proclaim not only what can be said for, but what can be said against, South African farming. There has been no attempt to gloss over difficulties—feeling, as we do, that South African farming, with all its difficulties, is for the right type of man a proposition sufficiently attractive to bear being presented honestly on its merits; and for men other than the right type there is no room in high-class farming in South Africa or elsewhere.”

It is possible that the author errs somewhat in the direction of giving difficulties too great a prominence, but he declares that it is in the interest neither of the country nor of the individual that anyone not prepared to battle for success should be lured into farming under a misapprehension. Separate chapters are given to maize-growing, sugar, tobacco, cotton, wheat, sheep, etc. The advantages and disadvantages of each are clearly specified. Reasons are given for estimating that the price of any individual produce will rise, fall, or remain steady. In addition to these there are chapters on *Irrigation*, *Farms*, and *Finance*, in which last the extent to which the Government assists the farmer is outlined, and a general one on *Does Farming Pay?* The book makes, of course, no attempt to teach farming, but no better guide

could be found for anyone who contemplates farming in South Africa, but is undecided as to which class of farming to adopt.

Journal of the Department of Agriculture, No. 1. Vol. 2. Pretoria. 6d.

THE following notes extracted from this number of the Journal will indicate its wide scope.

Larvæ of the *Codlin moth* are being collected in Italy for transshipment to South Africa. This is not because South Africa has not already a sufficient stock of *Codlin moths* of its own, but because it is hoped that the Italian variety will take with it a parasite that in Italy keeps its numbers in check. It may therefore be hoped to reduce the pest in South Africa. Another parasite, the *Aphelimis mali*, is being exported from America in the hope that it will prey on the *Woolly aphid*.

The *Nagana* disease having caused severe losses to stock-owners in Zululand, the Union Government has stationed a Veterinary Research Officer at Empangeni to study the connection between tsetse-fly, game, and the disease.

A systematic oil survey is being inaugurated by the Union Government for the purpose of determining the agricultural potentialities of different districts.

It has been discovered that the disease known as *Snotsiekte* is communicated to domestic cattle by the black wildebeest, by drinking at pools to which they have access. The disease is almost invariably fatal, but the remedy, the driving away of the wildebeest, is simple.

South African tobacco was, until recently, considered free from serious insect pests. In several places, however, a pest has now appeared, which it is feared may cause extensive damage. In its larval form it is popularly called the *Tobacco-leaf grub*. The beetle which produces the larva is a native of South America, and was probably introduced at the time of the South African War by beetles hibernating in bales of forage.

The Union Government agronomist is not pleased that South Africa should have to import cereals. Wheat production, for various reasons, is restricted in southernmost Africa, but many localities are suitable to the production of rye, if a demand existed. He, therefore, appeals to South Africans to acquire the habit of eating rye bread so that a demand may be created, and South Africa, so far as cereals are concerned, become self-supporting.

South Africa is a country of large farms, and until recently small holdings have not been regarded as profitable. To

dispel this belief the *Journal* publishes the accounts of a ninety-four morgen farm on the high veld. The purchase price was £777, stock and gear cost £1,000; the gross income in one year (in which the rainfall was rather below the average) was £2,487 10s.; wages (including no allowance for the farmer's own labour) amounted to £266 10s.

Prickly Pear as a Fodder for Stock. Charles F. Juritz, Agricultural Research Chemist, Cape Town. (Pretoria: Science Bulletin, No. 16. 1920.) 3d.

It is natural that farmers in such a country as South Africa should be keenly interested in drought-resisting plants that have a fodder value. Of these the prickly pear is the hardest, but it must be used with great caution. The spines, especially those on the fruit, if swallowed, cause inflammation in the mouth, throat, and stomach. Stock will eat the fruit if given the opportunity. They must therefore be kept from it, and the pear, when used at all, fed to them by hand after special treatment. The prickles can be softened or destroyed by burning or boiling. Spineless varieties of prickly pear exist, but they have not so high a food value as the others, and cannot be relied on not to grow spines. Even after treatment, a diet of prickly pear tends to scour stock. As the food value of the pear is in any case small it can, at the best of times, only be used mixed with more nutritious food. It has the additional drawback that stock scatter the seed broadcast. Prickly pear, therefore, can only be regarded as an emergency fodder, but as it has been used with marked success after careful treatment, and as it may save the lives of stock in drought-time, its value is by no means negligible.

Sudan Notes and Records. December, 1920.

THIS is an excellent number. Under the title, "Two Murder Trials in Kordofan," the Editors give the evidence adduced in two trials, both of them of men who professed ability to cast out devils, and who used such drastic methods that their patients died under their hands. In both cases the relatives of the patients, though much distressed at the brutalities inflicted on the sufferers, were persuaded, such was their confidence in the treatment, to allow it to continue. Mr. H. A. MacMichael describes the "Kheiran," the cultivable strips of land that lie between parallel sand-dunes along a

narrow belt of land between Shershār and Bāra. Mr. G. W. Murray compares the Nubian and Bari languages. Under the title, "Beliefs about the Mansions of the Moon," Mr. J. W. Crowfoot shows that in the Sudan the belief in the influence of the heavenly bodies on all human affairs is widely held; particular months, weeks, or days being especially lucky or unlucky for marrying, putting on new clothes, petitioning kings, making love philtres, etc. These Sudanese beliefs are curiously parallel, even in small details, with many beliefs current in England, as the author shows by quotations from the 1920 issue of *Raphael's Prophetic Almanac*. The "Notes" describe the methods of a professional Locust-Banisher in Darfur, marriage customs among the Beni 'Amar tribe, and the Shilluk Peace-Ceremony. In correspondence on Cannibalism in the Bahr-el-Ghazal, the editor advances the suggestion that Nyam-Nyam is an onomatopoeic word suggesting the gnashing of teeth. In reality it is a widespread Bantu and Semi-Bantu root of great ancient meaning "meat."

A Vanished Dynasty. By Sir Francis Fuller, K.C.B., C.M.G., late Commissioner of Ashanti. (London: John Murray. 1921.) 16s. net.

THIS is a brief history of Ashanti, from the earliest days of which there is any reliable record down to the present. The first three chapters carry the history of the Ashanti Confederation from about the year 1635 down to the end of the eighteenth century. For his account of this period, the author relies partly on Bosman's *Description of Guinea*, but principally on tradition recounted by native chiefs. At the beginning of the nineteenth century Ashanti came into touch with the outside world, and its history, therefore, becomes more authentic. Sir Francis Fuller has compiled the record from 1800 down to the present day from authors such as Bowdich, Cruikshank, Winwood Reade, Armitage, Montanaro, and Claridge, from official documents in the possession of the Foreign and Colonial Offices and from his own knowledge of recent events. The Ashanti are, perhaps, the most notable of all the Negro pagan races, and their history is that of a barbarous power gradually and reluctantly awakening to a realisation of the far greater power of the British Empire. The kings of Ashanti were badly served by their interpreters—usually semi-educated Negroes from the coast—who drafted their diplomatic correspondence with successive Governors of the Gold Coast, often in such faulty

English that misunderstandings were bound to arise. King Quacoe Duah III. must have aroused amusement in the Colonial Office by concluding a dispatch to Lord Knutsford, "I wish Her Majesty's Government a merry Christmas and a prosperous and blessed New Year." A later dispatch, purporting to come from the same monarch, to Queen Victoria followed the usual diplomatic form so closely that it was at once suspected to be, what it actually was, an impudent forgery of which the King of Ashanti had no knowledge.

The last event recorded in the history is the part that the Ashantis, whom Sir Francis Fuller describes as "a valiant, clever, and lovable people," took in the Great War. What little Sir Francis has to say about the Ashantis' constitution and law is so interesting that it is to be regretted that he modestly leaves their "manners and customs" to "a more competent pen." Some interesting pen-and-ink drawings by Lady Fuller form a notable feature of the book.

The Tanganyika Territory (formerly German East Africa), Characteristics and Potentialities. By F. S. Joelson. With 17 illustrations and a map. pp. 256. (London: T. Fisher Unwin, Ltd., 1920.)

THIS is a very unsatisfactory book. The only things one can say in its favour are that it is well printed, that it contains a few excellent photographs, and that it preserves some good anecdotes of the late campaign in the country. The title would lead one to expect an authoritative account of the Tanganyika Territory which the writer says remains largely a *terra incognita* to English readers, and will prove in future years a most important asset to the Empire and to civilisation; but if anyone buys it with that expectancy we fear he will be disappointed. Mr. Joelson tells us nothing about the territory as a whole, and very little about one small portion of it. Readers surely have the right to ask for the credentials of a writer who sets out his opinions on important matters; they want to be told how long he was in the country, what his position was, what previous experience he had of Africa. Mr. Joelson leaves us in the dark as to these matters. The only definite fact we know of him is that he was a prisoner in German hands. From internal evidence we should gather that he was a newcomer, that he went some distance up the railway from Dar-es-Salaam, and then on safari (he writes of his experience with all the zest of a tenderfoot) to Utete, a place on the Rufiji river a short distance from the coast; and from the

many allusions he makes to rubber we should imagine that he was there engaged on a rubber plantation. We should be sorry to misjudge the author. He may conceivably be a man of great African experience; but, if so, he should have made the fact clear and should not have written in such a way as to leave the impression of amateurishness. Certainly the confident, omniscient way in which he voices his opinions is characteristic of the amateur. Nobody who knows anything about natives would dogmatise about them in the way he does. Why people should, after a short acquaintance with African life, consider themselves qualified to instruct the world in the intricacies of native character is a mystery to us. Mr. Joelson gives no proof of knowing more than what an intelligent person could gather from a short tour and an evening or two spent in the company of a communicative District Commissioner or missionary. Yet he presumes to generalise in a way that would be possible only to omniscience. To quote but one example: "The negro character is altogether too fickle in affection for it to provide the deep and lasting love that is so often found among both men and women of the white races." A man has every right to say: "As far as my experience goes, I have never known in all the five or six years of my acquaintance with them an instance of deep and lasting love between a black man and woman"; he has no right to dogmatise about the "negro character"; as a matter of fact he is wrong. The book abounds in sweeping and false statements of this kind about natives. And in many other matters he is not less dogmatic and inaccurate. After describing the opening up of East Africa by the travels of Europeans, *e.g.*, he goes on: "As an unhappy sequence venereal disease and smallpox are common throughout the whole of East and Central Africa, while leprosy is by no means unknown"—seemingly unaware that those scourges were common in mid-Africa before the advent of the European.

Missionaries will no doubt be glad to know that Mr. Joelson approves of the objects of their work, though he does not agree with their methods, and makes the astonishing statement that Protestant societies, "with rare exceptions," have not advanced to the point of teaching that *ora* alone will not suffice; *labora* must accompany it! How many missionary societies *does* Mr. Joelson know?

In some matters Mr. Joelson writes sensibly enough but with an exaggeration that spoils the effect. He might, at least, take care to be consistent; on one page he writes: "Bodily chastisement is the only corrective understood by the uncivilised native"—which, of course, is sheer non-

sense; on another page we find the more sensible statement that ridicule is as "potent a penalty as any." According to Mr. Joelson, the British rule that has supplanted the heartless brutality of the German (he does not mince his words in speaking of this brutality) is sentimental, lacking in justice and firmness; and the prestige of the British is lost. Had Mr. Joelson confined his efforts to giving us a racy account of his experiences, especially as a prisoner of war, we should have welcomed it. As it is we are glad to have the picture he gives us of General von Lettow-Vorbeck—who, though a brute, put up a fine fight—and of the British East African Intelligence Department; the latter especially makes good reading. All that is of value in the book might have been compressed into the limits of an article in this Journal. There was no need whatever to swell it into a book of 250 pages and expect the public to pay a guinea for it E. W. S.

CORRESPONDENCE

TO THE EDITOR OF "THE JOURNAL OF THE AFRICAN SOCIETY."

DEAR SIR,

Those who have heard, or read, Mrs. Ella Kidney's admirable paper on "Native Songs from Nyasaland," published in the January issue of the JOURNAL, may be interested to know that there is a song, the range of which is at least as far as from the Zambesi delta to Lake Nyassa, which appears to be a Christian hymn of purely native composition. The words, as given in Scott's Mang' Anja Dictionary, under the word *Nyimbo* (a song), are *Si-na-piama, si-na-mama, wa-ku-lewa naye, nda-sotani, mama, ndiwe Maria*. (I have no mother, I follow thee, thou art my mother, Mary.) The word *Maria* is pronounced as it is in the Roman Catholic Church Service.

Scott calls it a mourning song. I heard it over twenty years ago sung as a canoe song. If, as it seems, this is a purely native Christian hymn, it has surely an almost unique interest. On the same supposition it must be nearly two hundred years old, for the Jesuits were expelled from the Zambesi district in the middle of the eighteenth century, and did not return until comparatively recently.

I am,

Yours, etc.,

RALPH DURAND.

JOURNAL OF THE AFRICAN SOCIETY¹

VOL. XX. NO. LXXX

JULY, 1921

NOTE.—There are many subjects in Africa, such as Racial Characteristics, Political and Industrial Conditions, Labour, Disease, Currency, Banking, Education, and so on, about which information is imperfect and opinion divided. On none of these complicated and difficult questions has Science said the last word. Under these circumstances it has been considered best to allow those competent to form an opinion to express freely in this Journal the conclusions at which they themselves have arrived. *It must be clearly understood that the object of the Journal is to gather information, and that each writer must be held responsible for his own views.*

THE CAPE TO CAIRO RAILWAY²

THE subject of this paper is the railway route which will connect the two extremes of the African Continent, which are nearly 5000 miles apart in a direct line. The mileage will, of course, be considerably greater by the route actually to be traversed.

Fifty years ago the greater portion of the vast African Continent was *terra incognita* to the white man, whereas to-day there are comparatively few parts to which he has not penetrated.

The story of the development of this railway scheme is so closely connected with the political history of Africa, that I must give you some very brief survey of this history as far as time will allow.

¹ Owing to pressure on space, it has been found necessary to hold over the report of the Address delivered to members of this Society by Sir Hugh Clifford on "United Nigeria," on 10th June, 1921, and the account of the proceedings on the occasion, to the next issue of the Journal.

² This paper was read before a Meeting of the Society on 21st April, 1921, when Lord Buxton occupied the Chair. The paper was accompanied by a cinematograph display. For report of other proceedings see page 284.

It was the daring Portuguese navigators, notably Bartholomeu Diaz, who rounded the Cape of Good Hope in 1486, and Vasco da Gama, who, adventuring still further, explored the East African coast in 1498, that may be said to have been the first to make Africa known to Europeans.

The first European settlement in South Africa was by the Dutch under Jan van Riebeck at Table Bay in 1651, and they were subsequently reinforced by French Huguenot settlers in 1689.

From 1780-3, and again in 1795, England and Holland were at war, and the Cape Colony and Walvisch Bay were captured by the British from the Dutch, but were restored again in 1802. In 1806, however, war again broke out and the Colony was again taken by the British, and has since that date remained under the British Flag. In 1806 there was a white population of 27,000 in the Cape Colony and some 30,000 slaves, while the annual imports amounted only to some £100,000 and exports to £60,000. The total value of the imports and exports for the Union of South Africa in 1919 approached £103,000,000 sterling.

When the emancipation of slaves took place in 1834 some 35,700 slaves valued at £3,000,000 were liberated, but only about £1,250,000 was paid in compensation. The resulting dissatisfaction was one of the prime causes of the Great Boer Trek in 1835, when some 10,000 Boers left the colony and crossed the Orange River to form the nucleus of the subsequent Orange Free State Republic.

In 1837 the Trek Boers crossed the Vaal River, and in 1840 the short-lived Dutch Republic of Natalia was formed. In 1843 Natal was, however, proclaimed a British Colony. The independence of the Transvaal and the Orange Free State Republic was established in 1852 and 1854 respectively, and in 1857 the first South African railway, sixty miles in length, from Cape Town north to Wellington, was authorised—really the first section of the Cape to Cairo Railway.

In 1877 the affairs of the Transvaal Government became so desperate, and the country in such bad plight, that it was annexed by Britain to prevent Zulu inroads. Trouble with the Zulus, however, culminated in the Zulu War in Natal in 1879.

TO THE
LIBRARY

Owing to the non-fulfilment of an informal promise of Home Rule, the Boers became dissatisfied, and in 1880 declared war on England, and soon after the battle of Majuba in 1881 peace was declared and the Republic was again recognised.

It was in 1881 that I first went out to Africa. The railway had at that time reached Beaufort West, 300 miles north of Cape Town, and in 1885 it reached Kimberley, where the work on the diamond fields had been in progress since 1870.

In 1884 the Rev. J. Mackenzie, a missionary who had been appointed Deputy Commissioner of Bechuanaland, concluded treaties with various Bechuanaland Chiefs, inhabiting the country lying to the west of the Transvaal Republic. The Boers, however, in spite of these treaties, attempted to secure this country for themselves. As Namakwaland and Damara-land had been annexed by the Germans, and in 1885 a sovereign charter conferred on the German Colonial Company to administer that country, there was a great danger of the Boers and Germans joining hands and closing all access to the north.

Cecil Rhodes succeeded Mr. Mackenzie as Deputy Commissioner in Bechuanaland, and not only refused to recognise the claims of the Boers to annex the country that connected the Transvaal with the recently established German Colonies, but in response to his appeals the Home Government sent Sir Charles Warren in charge of a strong force to keep them out of it.

In a recent conversation which I had with Sir Graham Bower, who was at that time assisting Mr. Rhodes in his work, he told me that it was a loyal Dutchman named Van Niekerk who drew Rhodes's particular attention to the necessity of keeping this country for the Cape by pointing out to him that, although this land was of little value, it was the road to Matebeleland and Mashonaland—the Rhodesia of the future—where there was much mineral wealth.

In 1885 Bechuanaland proper was annexed to Cape Colony, and Mr. Rhodes began his first efforts as a politician to unite the British and the Dutch in friendly relationship. In fact, *he could only have done what he did* with the approval of

Mr. Hofmeyer, who was leader of the Dutch Bond. In the same year, 1885, a British Protectorate was declared over the whole of Northern Bechuanaland, including Khama's country extending to the confines of Matebeleland.

By these actions the road to the north was kept open, and at this time may be placed the commencement of the great extension of British influence northwards. Had President Kruger had his way, this gateway to the north would have been blocked to British influence, and the history of Central Africa might have been very different from what it has been. Certainly there would have been no Cape to Cairo Railway as we know it.

About this time extensive gold discoveries were made in the Transvaal, and by 1886 the Banket Gold Reef of the Witwatersrand was clearly defined. This discovery was one of the chief milestones of railway progress in Africa. The line was extended to the Rand in 1892, and the short economic railway between Johannesburg and Durban effected in 1895.

Meanwhile Rhodes had been active, and as a result of treaties made with the Africa Chiefs—Lobengula of Matebeleland and Lewanika of Barotseland in 1888-9, the British South Africa Company was incorporated and was granted a Royal Charter to administer and develop the districts of Mashonaland, Matebeleland and Barotseland, now known as Rhodesia.

The Transvaal Boers were, however, at this time also preparing to occupy the Mashona country, and it was again due to the energetic promptitude of Cecil Rhodes that a territory half the size of Europe was brought under British influence. He sent up the five hundred Rhodesian Pioneers to make an effective occupation of the country, which they did by establishing Fort Salisbury in 1890.

It was largely due to Dr. Jameson's untiring efforts, even when sorely stricken by illness, that Rhodesia was held during the troublous times through which she passed during the next few years. I lived with Jameson at that time and witnessed his efforts. I had been sent up by Rhodes to examine the mineral wealth of the country.

Owing to the depredations of the natives, the Matebele stronghold of Bulawayo was occupied by Jameson and his

troops in November, 1893. In 1895 the country officially took the name of Rhodesia after its founder.

In the meantime the region further to the north had also been gradually emerging from obscurity.

After Commander Cameron's return from his memorable journey across Africa in 1872-3 King Leopold of Belgium engaged the services of H. M. Stanley (who had recently returned from his expedition to Central Africa to find Livingstone) to carry out further exploration in the Congo country.

During his mission in 1874-7 Stanley concluded treaties with various native chiefs, covering rights over very large territorial areas. The International African Association and the International Association of the Congo were formed to acquire these rights, and subsequently, when the adjustment of the European spheres of influence in Africa was arranged at the Berlin Conference in 1884, the rights of these associations were consolidated in the neutral Congo Independent State which was given over to the Administration of King Leopold, whilst Belgium was given the pre-emptory right of subsequently taking up the country as a colony. This right was subsequently exercised in 1908, when the country became the Belgian Congo.

As a result of the frequent references by Livingstone, Cameron, Ivens and Capello (the Portuguese explorers) and others to the probable mineral wealth of Katanga—the south-eastern portion of the Congo State—attention became directed to this region. Rhodes, who was always on the look-out for a mineral field to the north which would serve to support a railway, had become interested in the country, owing to the reports he had received of it from Mr. Arnot, the missionary of Garenganza in Katanga. As there was a long delay in the occupation of this part of the country by King Leopold's representatives, Mr. (now Sir) Alfred Sharpe was despatched by Sir Harry Johnston in 1889 to enter into diplomatic relations with the Mnyamwezi chief, Msiri.

As, however, the Katanga was included in the area which had been handed over to King Leopold's Administration, a company called the Katanga Company was quickly formed in Brussels in 1890 with a capital of 3,000,000 francs, a large

part of it subscribed by English capitalists, who were represented in the negotiations by Commander Cameron. This company secured a ninety-nine years' concession of the mineral rights over a third portion of the Katanga territory from King Leopold; Cameron and Sir J. Kirk were directors of this company. The Katanga Company sent out two or three expeditions in 1891 to explore the country. One, under Captain Stairs, travelled in from the east coast. Unfortunately the expedition lost one of its members, Captain Bodson, who was killed by the natives, and subsequently lost its leader, who died at Chinde on the journey home in 1892.

Another expedition, under Messrs. Bia and Francqui, journeyed by way of the Lower Congo River, and, after exploring the country, returned to Europe in 1893. These expeditions mark the inauguration of the official Belgian occupation of the country, and circumvented Rhodes's attempt to obtain a footing in it.

The latter of these two expeditions visited and investigated a number of copper deposits in Katanga, but the relative inaccessibility of the country at that time, and what they considered the relative low grade of the ores, put aside all idea of exploitation. These mineral discoveries remained, therefore, undeveloped, and they even dropped into oblivion. It was only when they were rediscovered by the members of the expedition which I sent out under the leadership of Mr. George Grey in 1901 that their real value and economic importance were recognised.

It was in 1891 that I first went up to Rhodesia with the object, as I have already stated, of reporting on the mineral possibilities of the country for Rhodes. I had left the rail-head at Vryberg and trekked with wagons and also travelled on foot over a great deal of the country, and finally came out at Beira. I subsequently reported to Rhodes that the mineral wealth was there right enough, but a short railway to the coast would be necessary for its economic development. I pointed out that, though the main line from the Cape must eventually traverse Rhodesia, this line would be uneconomic for mineral traffic because of the distance to the coast. Rhodes agreed with me, and when I next saw him

in London, 1892, he told me that he had started the Beira Railway. This line was opened to Salisbury in 1899, and to Bulawayo in 1902, the year Rhodes died.

Slowly the line from the south was pushed on and arrived at Mafeking in 1892, and stuck there for some time. Sir Charles Metcalfe, who was closely associated with Rhodes's railway plans, tells me that it was with the greatest difficulty that he finally persuaded Rhodes to agree to the construction of the railway beyond Mafeking, although after the railway reached Bulawayo Rhodes became very enthusiastic about it. Financial difficulties may have been the only reason for Rhodes's hesitation. I quote the following from Sir Charles Metcalfe's letter on this subject. He says :—

It was not till 1896, when his hand was forced by the Matebele Rebellion and the Rinderpest, and goods were costing £200 per ton freight from Mafeking to Bulawayo, that he (Rhodes) gave the order to construct the railway as far as Bulawayo with all speed. This was done in record time, and the line was opened for traffic to Bulawayo in November, 1897.

Again referring to the extension of the railway northward, Sir Charles writes :—

It is a lasting regret that he (Rhodes) never saw the Victoria Falls. He died before the line was finished in 1904. After that came the extension to Broken Hill, and after that you came into the scheme, and with your powerful assistance, the line was made to the Congo frontier in 1909, and thence extended, under Belgian Administration, past the great copper mines, with which you have been so notably associated from their inception.

I must now for a moment turn back to the early days before the railway had advanced beyond Mafeking. In the early 'nineties Rhodes had offered to me certain mineral rights in Northern Rhodesia in order to enable me to finance an expedition to that country, as he was very anxious that I should further his railway project by finding mineral wealth there. I accordingly sent up one or two of my best men to examine country where gold had been reported, several hundred miles south of Katanga, but, as nothing of value was found, the operations were stopped.

As Rhodes was particularly anxious that mineral wealth should be found in the north, which would help his Cape to Cairo Railway scheme forward, I agreed in 1898 to make another effort. My services were at that time bound to the Zambesia Exploring Company, and he therefore granted certain rights in which that company would hold a large interest. These rights included a 2000 square mile mineral concession, together with the right to locate a township and a pier at the southern end of Lake Tanganyika which was intended to be the Rhodesian terminus of the Cape to Cairo Railway. In return for this grant, Rhodes stipulated that £20,000 must be spent in prospecting the mineral area, and that a steamer should also be put on Lake Tanganyika for carrying material to build the telegraph line for the construction of which along the German shore of the lake he had recently obtained the Imperial sanction.

This was the first time I took a real practical interest in Rhodes's Cape to Cairo Railway scheme, and I recollect him saying to me after we had arranged all our plans and were lunching together on the veldt after a morning's shooting outside Kimberley: "This is very pleasant, Williams; one day we will go by rail and do this together on the banks of the Zambezi." I lunched on the banks of the Zambezi on my way down from Katanga by rail in 1911, and recalled Rhodes's words and felt sad to think he was not there to have seen the progress of his great idea and his bridge over the wonderful Victoria Falls.

The Tanganyika Concessions Company, which was formed to take over these rights and carry out the work they involved, received its name from the Tanganyika Township Concession referred to. The steamship *Cecil Rhodes* was built at Wivenhoe, then taken to pieces and sent out and re-erected on the shore of Lake Tanganyika, where for some years, until she was wrecked in a storm, she fulfilled her duty carrying the material for the telegraph line. A prospecting expedition was also organised and placed under the late Mr. George Grey to explore for minerals on the Rhodesian side of the Congo-Zambesi Divide.

At the same time I entered into negotiations with King

Leopold of Belgium, from whom I was successful in obtaining for the Tanganyika Concessions, Limited, prospecting rights over 60,000 square miles of the Katanga district on the northern side of the Congo-Zambezi Divide, and during the years 1899 to 1904 the expeditions under the leadership of the late Mr. George Grey revealed the Kansanshi Copper Mine in Rhodesia and practically the whole extent of the great Katanga Copper Belt, besides important gold, tin and diamond deposits.

During the siege of Kimberley, when Rhodes was shut up there, I managed to send him a message by searchlight announcing our first copper discoveries in Rhodesia. I hoped this would cheer him up, and I believe it did.

Rhodes had intended to extend the railway from Bulawayo across the Zambezi to the north, and then along the Luangwa Valley through North-Eastern Rhodesia to Lake Tanganyika, and to utilise this 400-mile stretch of water as part of his route to the north. Germany blocked this "all-red" route by objecting to the strip of the Congo State granted by King Leopold to make it possible. Besides, the physical and financial difficulties presented by this route also proved to be insurmountable, and when the Wankie Colliery, near the Victoria Falls, was opened up, and the great mineral discoveries to which I have referred were announced in 1901, he decided upon the extension of the railway along its present route.

As a result of my successful negotiations with King Leopold, Rhodes asked me to help him in trying to secure from the King the right to extend the Cape to Cairo Railway through the Congo State to the Nile. He told me then about Mr. Alfred Sharpe having been sent up to secure Katanga and the failure of that effort, and he also told me he had since gone to Brussels and proposed a plan of co-operation with King Leopold, which also failed to please that monarch. "I thought I was clever, Williams," Rhodes remarked, "but I was no match for King Leopold."

Rhodes then went to Germany and tried to induce the Kaiser to allow him to bring his railway through German East Africa, but the agreement he was able to negotiate with

the Kaiser was what Rhodes described to me as "all ifs and ands," but he said, "You might use it as a lever with King Leopold."

An amusing incident happened during these negotiations. Rhodes had invited me to lunch at his cottage at Muizenberg one Sunday to discuss the future route of the Cape to Cairo Railway, but, alas! a friend turned up, and even Rhodes with his best efforts could not get rid of him. At last, after lunch and in sheer desperation, Rhodes asked me to come for a walk amongst the rocks, and there on a big rock we sat absorbed in a map of Africa, oblivious to everything. Finally, Rhodes said: "This is the way we will go," pointing through the Congo State, "but your mineral concession is only for thirty years; it is too short. Get King Leopold to extend it to ninety-nine years—the British Public love a ninety-nine years lease. The King will agree to this, he will ask for something, a sort of fine. Give him what he wants, and when you have done all this you can afford to give me a share of your minerals to assist me with my railway." We had to return to the cottage through two or three feet of water, the sea having risen and completely surrounded us.

I returned to England and approached King Leopold, and was successful in obtaining an extension of the mineral concession, and a concession to build a railway from the Rhodesian frontier through the Congo State to the Nile, and I offered this right to Rhodes, together with a half-share of the mineral rights I had acquired for the Tanganyika Concessions Company, to assist him to finance his railway. Rhodes's financial supporters, however, were so extravagant in their demands upon King Leopold in return for bringing their railway up to his frontier that the scheme fell through.

King Leopold, however, agreed to reduce the concession for the railway to one to connect up the navigable Congo with the whole mining area of Katanga as far south as the Rhodesian frontier and west to the Ruwe Gold Mine. The Belgians were to own 60 per cent. and my company 40 per cent. of this line. This was the inception of the Chemin de fer du Katanga, or Katanga Railway Company (which now connects the Rhodesian Railway with the navigable Congo),

and which will at an early date connect the Benguela Railway with the Cape to Cairo Railway.

It has often been said that Rhodes's original plan was an "all-red" route, namely, British throughout, *viâ* Lake Tanganyika. I beg leave to contradict that statement. Rhodes was far too practical a man to build a railway where there was no assured traffic to make it pay. The railway *had* followed mineral discoveries all the length of its route from Cape Town. Why, then, should it be taken to Lake Tanganyika, as was for the time his intention? Simply because his attempts to get it through any other way had failed. He had failed in the two attempts I have already mentioned to get it through the Congo State. Seeing that I had been more fortunate in dealing with King Leopold, he came to ask me if I could negotiate a route for him through the Congo State. "You have succeeded where I failed," he said. Rhodes never felt himself tied to an "all-red" route. To get the railway through some friendly state was equally satisfactory to him, so long as the line was built. And when the Katanga mineral discoveries showed how the line could be made to pay for itself, he never hesitated, but up to his last moment was anxious for the line to be constructed up to the frontier and onwards through the Congo State. The last letter he ever wrote me was an offer to build the Cape to Cairo Railway, which I had negotiated for him with King Leopold, through the Congo State. If this offer had been accepted, it is impossible to imagine that Rhodes would have gone *viâ* Lake Tanganyika or any other way, unless, indeed, he wanted to build two railways to Cairo.

Soon after the great mineral discoveries were made in Katanga it became evident that, for the economic exploitation of this great mineral wealth, it would be necessary to have a shorter and more direct route to the coast than the Cape to Cairo line could provide. The great mineral deposits of Kimberley, the Rand and Rhodesia had all required their shorter economic lines to the coast, and so also did Katanga.

A study of the map showed that such a route would extend westwards from the copper belt along the Congo-Zambezi Divide to the coast near the old Portuguese town of Ben-

guela; in fact, along the old slave route to the west. A railway line along this route would lead to the fine natural harbour of Lobito Bay on the north of Benguela.

This route would save some 3000 miles transport as compared with the route *via* Cape Town. The greater part of this route, however, would run through Portuguese territory, namely, through Angola. After having laid this scheme before King Leopold and obtained his approval and promise of co-operation, I negotiated with the Portuguese Government and obtained from them the right to construct the Benguela Railway. The Benguela Railway Company, which was formed to carry out this scheme, commenced work in 1903.

Rhodes had died in 1902, but I had made him a promise before his death that I would do my best to carry forward his Cape to Cairo scheme, and I therefore determined to make another effort to get his dream realised. In an audience which I had with King Leopold I suggested that I should try to get the British Government to interest themselves in the Congo and assist in carrying the Cape to Cairo Railway through the Congo State. The King suggested that I should see Lord Cromer and try to get him to settle the Lado Enclave difficulty and to ask him to give Belgium a pier on the Nile for the Belgian end of this railway, and that I should also see Mr. Joseph Chamberlain and try to obtain that gentleman's support.

I went to Egypt and saw Lord Cromer, but he declined to give King Leopold a pier. I also saw Mr. Chamberlain, but he could not help me at that time because Lord Cromer had refused, and the recent South African War had cost the country about £200,000,000. He was, however, very encouraging both with regard to this project and also with regard to the Benguela Railway. He believed the latter railway had a great future, and pointed to the successful earnings of the short economic line from Natal to the Rand.

The Germans took a keen interest in the Benguela Railway from its first inception, and about this time Mr. Chamberlain wrote advising me to have nothing to do with overtures that were being made to me to amalgamate a railway in German South-West Africa with the Benguela Railway.

As the route to Benguela lay partly through Belgian Congo, I again met King Leopold, and we finally arranged a co-operative railway scheme to comprise (1) the Katanga Railway, which would link up the Rhodesian Railway with the navigable Congo at Bukama; also (2) a line to connect up this railway with the Benguela Railway; and (3) a line to connect up the Lower Congo Railway at Leopoldville to the Katanga Railway at Bukama. The earnings of these three railway systems, comprising some three thousand miles of line, were then to be pooled so that they would mutually help each other.

That agreement stands to this day, and under it construction is being pushed ahead in Angola and in the Belgian Congo to complete as early as possible a direct line from the Katanga mines to the port of Lobito, near Benguela, on the West Coast. The worst and most expensive part of the work is finished. Had it not been for the interruption caused by the war (which stopped our work and necessitated an entire reconstruction of the financial arrangements), this international railway scheme, in which British, Belgian and Portuguese companies are harmoniously engaged upon the industrial development of Central Africa, would have been complete and in operation.

But to revert to the Cape to Cairo route. The line reached the Victoria Falls in 1904, and in 1907 it was completed to the Broken Hill lead and zinc deposits which had been discovered in Northern Rhodesia. Here the railway stuck for a long time, its head in the wilderness, within 132 miles of the Congo frontier. I am sure had Rhodes been alive it would not have been allowed to stop there so long.

Eventually, after many difficulties, I was able to arrange for the extension of the line northwards from Broken Hill to the Congo frontier, which was reached in 1909. The Belgian Katanga Railway then carried the line to Elisabethville, the capital of Katanga, and on through the copper belt to Bukama on the navigable Congo River, where it arrived in 1916, in accordance with the co-operative railway plan which I have already referred to. The route to Cairo was thus opened from the Cape as far as Stanley Falls by rail

and river, and also from the Cape to the mouth of the Congo River. All this was accomplished chiefly through the splendid co-operation of my Belgian colleague, Monsieur Jean Jadot, to whom I was introduced by the late King Leopold—"Le Grand Jadot," as the King called him to me.

So much for the southern and central sections of the Cape to Cairo Railway.

I need not here recount to you the story of the British intervention in the affairs of Egypt. Suffice to say that the disastrous series of events in the Sudan which culminated in the death of Gordon at Khartum in January, 1885, led to its abandonment by the British. The operations of Kitchener in 1896-8 brought the Sudan again, however, under Anglo-Egyptian control, and the Khalifa, successor to the Mahdi, who was signally defeated at Omdurman in 1898 by Kitchener, was killed a year later by the forces operating under General Wingate at Kordofan.

For the Sudanese campaigns the railway was built from Wady Halfa to Abu Hamed in 1897, and to Atbara in 1898, and in 1899 it was extended on to Khartum. In 1904-6 the line connecting Atbara to Suakim and Port Sudan was built. In 1910 the railway further extended from Khartum to Senaar on the Blue Nile, and thence westwards to Kosti on the White Nile, whence it was subsequently extended to El Obeid.

It had long been my desire to arrange for the systematic exploration of the Sudanese side of this Divide, in the hope that possible mineral discoveries would attract the Sudanese railway south to complete the link between the Cape and Cairo, and thus at last realise Rhodes's dream.

The opportunity to do this presented itself quite lately. As the result of a paper entitled "The Milestones of African Civilisation," which I read before the Royal Colonial Institute in May, 1917, and in which I demonstrated how the various mineral discoveries in Southern Africa were generally found on Divides between river systems, and that these discoveries had led the Cape to Cairo Railway step by step northward, and thus formed veritable milestones marking the progress of civilisation into the interior of the Dark Con-

continent, I had a call from Major C. Christy, who, having read this paper, told me that he had spent many years on the Nile-Congo Divide. He had, moreover, read a paper before the Geographical Society showing that this Divide must be the future route of the extension of the Cape to Cairo Railway from Khartum southward. He also informed me that he believed that there was great mineral wealth on this Divide, and that he was confident that if I would provide him with a letter showing that he had my support and co-operation, he could obtain a concession for minerals in that region from the Sudanese Government.

I therefore gave him the necessary letter, and as a result he obtained a concession giving him the right to prospect for minerals over an area of some 60,000 square miles of country along the Sudanese side of the Divide. It is to be hoped that the Expedition, now at work under Major Christy, will succeed in discovering mineral wealth enough to justify carrying the railway southward, in which case the line will run along the Nile-Congo Divide to the Kilo gold-mines in the Congo State, whence it will connect up with the length of railway line from Stanleyville to Ponthierville, which already links up the lower and higher navigable portions of the Congo, thus forming a complete rail and river route between the northern and southern extremities of the African Continent. The river portions will gradually be replaced by railway—making a complete railway.

I have now outlined to you the historical development of the Cape to Cairo Railway scheme as far as this has been completed, and have indicated the approximate route which the last connecting link must take.

That there will also be at no distant date an East and West Coast Route as well as the Great Central Railway from the Cape to Cairo, I am confident, and even Mr. Wilson Fox's Tanganyika Train Ferry may become a realised fact.

There is, however, but little doubt that the main artery of traffic will be the one which I have dealt with, and which is far nearer completion than any other route. This North to South system will, in its course, link up the various mineral fields; it will also connect up the great navigable river and

lake systems, as well as the various shorter, and what I may term "economic," railroads to right and left, running to the nearest points on the coast, just as has happened in South Africa.

Probably the most important of these "economic" lateral railways is the Benguela Railway to which I have already referred. I was instrumental in bringing this line into being, and though there still remain some four hundred miles to lay before it is linked up with the Belgian Congo Railway and the Cape to Cairo line, though not lying in the direct north to south route, it is so intimately connected therewith that they can hardly be considered apart from one another, and from the political point of view these railways must be regarded as a single system. You will see the force of this remark in a moment.

The Benguela Railway already affords an excellent example of the manner in which an uncompleted railway in a new country promotes the development of the resources of the country. It creates trade as it advances, and we find that over that portion of the line already laid the traffic has more than doubled during the past four years. It has opened up a rich and fertile country, which has been described as the Argentine of Africa. But it is to the political aspect of this line that I now wish to call your attention.

The Benguela Railway is now seen, in the light of the Great War, to possess a strategic value of the highest order. That fact was doubtless realised by the Germans from the outset, and accounts for the persevering attempts they made to get the control out of Portuguese and British hands into their own. But that is another story. You can see for yourselves, however, by the map that the Benguela route, when linked with the Cape to Cairo line, affords a good backdoor entrance (as one may call it) to the Sudan and to Egypt, which would be extremely useful in the event of a blockade of the Mediterranean Sea. The Benguela Railway with the Cape to Cairo Railway connections to the Sudan will belong in their entirety to Britain and to friendly countries—the one our ancient ally Portugal, and the other our recent and gallant ally Belgium.

The political changes which are taking place in Egypt might conceivably some day result in the Suez Canal being closed and our sea-route to Egypt blockaded. Who would then be nearest to hand to defend it? The answer, of course, is our newest and most loyal subjects, British and Dutch alike, who would go direct by land *viâ* the Cape to Cairo Railway through the friendly Congo State. Our own troops and supplies could land at Lobito and travel *viâ* the Benguela Railway—the back door to Egypt—for our ancient ally Portugal would, beyond all doubt, exhibit the same friendly feelings and render all the assistance in her power, just as she did in the Boer War and in the Great War.

The Cape to Cairo Railway, you will thus see, is working out as its founder planned that it would do. It will be a main backbone connecting one end of Africa with the other and linking up into one great system the lateral railways to the coast.

Africa is the great source of raw materials. The future supply of copper for the whole of Europe is in Katanga, and these railways will open up to commerce the whole of the continent from end to end, and bring in their wake good government and civilisation to the natives.

In 1857 Livingstone wrote that by developing commerce with Africa both Europe and the African native would benefit. And he was right.

There would be few African millionaires if it had not been for the African native, and the marvel to me is that these gentlemen have not long ago created some great institution in Africa for the benefit of the native in return for those millions. I have a great belief in the African native. He is brave, but he is a child. He only wants fair handling to make him anything. Give him railways, he loves them, but do not give him drink.

Perhaps the best institution to which those millionaires could devote some fair share of their money would be the construction in Africa of railways. They could get a three-fold interest on their investment, for not only would they themselves benefit, but the native of Africa would be enabled to live a more useful life, whilst British workers and work-

shops would feel the influence of such enlightened and truly philanthropic action.

Before the war I used to ask myself this question : Why is it that foreign industrialists, financiers and banks will provide money for the construction of African railways, often strongly backed by their Governments, and thus bring work to their own workshops, whilst British banks and captains of industry seem unwilling to do the same? Since the war there are indications that our banks and captains of industry are waking up. But all this waking up will be of little use unless the splendid workmen of this country will put their shoulders to the wheel and assist with all their might.

ROBERT WILLIAMS

THE ENCROACHMENT OF THE SAHARA ON THE SUDAN¹

(*Concluded*)

THE Forestry Department are keenly alive to the desiccation of the Sokoto region, and in agreement with the Political Department are strongly of opinion that the greatest harm is done by the wasteful way the farmers take up new lands. "They tear out the heart of the country, occupying the valleys of rivers and streams and sweeping them bare of all timber. The high lands, which could be usefully occupied if not quite so fertile as the valleys, suffer from increasing drought, as all the moisture is drained out of the bare valleys. In a short period of years the rainfall diminishes, their large timber dies and the land becomes unusable."

This sweeping condemnation of the shifting cultivator, the incalculable harm of whose methods is beyond doubt, raises the controversial question of the relationship between forests and rainfall the intricacies of which cannot profitably be discussed here. Suffice it to say, however, that although the meteorologists for long denied that forests have any direct effect on rainfall they have more recently inclined to modify their views, but they are still far from being in agreement with the uncompromising opinion held by forestry experts in many different parts of the world. Putting aside this disputed point, it is generally agreed that deforestation is in other ways a contributing cause of progressive desiccation. Compared with the destruction of forests by the shifting cultivator, the destruction wrought by bush fires, graziers, iron-smelters and other craftsmen is of no great consequence. As long as virgin forest land remains the African farmer will continue to devastate

¹ Corrigenda :—On page 182, line 38 of the April number of this Journal is a reference to twelve million cubic *feet* having been led into Lake Kubiri. This should be cubic *yards*—twenty-seven times as much. Lake Kubiri is now eleven miles long with more than 15,000,000 cubic yards of water.—ED.

it unless the white man intervenes. The ground that he clears is subsequently abandoned, but although it may eventually become covered in scrub it never, in the Sudan at least, grows forest again.

Two or three authorities have endeavoured roughly to estimate the rate at which the forests of Africa have been destroyed by the natives and to determine therefrom the former limits of the forest areas. In this connection it is significant that many African food plants, notably maize, manioc and ground nuts, are of American origin. On the strength of this the late Major C. H. Stigand²³ went so far as to suggest that the African has only been an active cultivator for three hundred years. He calculated that a "populous tribe" would in this period eat twenty to forty miles into a forest. Major Stigand was a careful observer, and we may be sure his calculation was well based, but at best his can only be a very rough estimate and applicable to very particular areas.

Any one acquainted with the Kikuyu country of British East Africa must have been struck by the prominent patches of forest which cap so many of the hills in a country otherwise entirely cultivated and practically treeless. These islands of forest bear eloquent testimony to the former prevalence of forest throughout this region. Major Stigand, having enquired more closely into the matter, pointed out that the occurrence of colobus monkeys, typical forest dwellers and purely arboreal in habit, in an island far removed from the forests of Mount Kenya and the Aberdare mountains, can only be ascribed to the destruction of the surrounding forests by the Wakikuyu. He further pointed out that two other typical forest dwellers, the pigmy and the okapi, were both known to the ancient Egyptians, and must therefore have ranged several hundreds of miles north of the present limits of their forest habitat. It is indeed remarkable that all the region lying within the tropical rain-belt of Africa is densely forested except in its eastern extremity, and that this latter region was called upon to support a human population at a considerably earlier date than the more westerly parts of the same belt. If, however, we accept the suggestion that the African has only been an active cultivator for three hundred years, the coincidence of

the absence of extensive forests in East Africa with the fact of long-standing prevalence of man in the same area loses much of its significance.

To revert to the Northern Provinces of Nigeria and the destructive methods of the native cultivators it is interesting to note that steps are being taken to limit the activities of the farmers by establishing forest reserves. An important reserve has lately been defined on the Niger-Chad watershed in the eastern part of Sokoto Province, naturally a critical area if the process of desiccation is to be arrested. At the recent Empire Forestry Conference, Mr. H. N. Thompson, head of the Nigerian Forestry Department, carried an amendment to urge the preservation of forests for climatic reasons and for the preservation of the water supply.

It appears that the only man of science who has expressed an opinion on climatic changes in Nigeria is Dr. J. D. Falconer,²⁴ the Government geologist. Basing his conclusions on the distribution of iron ores and the occurrence of fixed sand dunes and dead *erg* in the Northern Provinces he considers that "the present *régime* of periodic rains within the Sudan represents a return to more humid conditions after a period of aridity, and there is some reason to believe that there have been many such climatic oscillations in the past." Those who are opposed to the desiccation theory are fond of quoting Dr. Falconer's opinion in support of their contention, but his conclusions appear to be in entire agreement with those of M. Henri Hubert, who stands for progressive desiccation. The latter, however, after a careful study of the matter and a close examination of the iron ore deposits and sand dunes of Senegal, not only recognises climatic oscillations in the past, but is of opinion they they occur *always with a total effect of ever-increasing aridity*. This may be equally true of the more northern districts of Nigeria.

On the north-eastern frontier of Nigeria the question of desiccation naturally centres round Lake Chad, whose ever-fluctuating shores have been a source of much discussion during recent years. M. Chudeau²⁵ has remarked that the lake was very high in 1824, 1851, 1854 and 1873, according to the various explorers who visited its shores in those years. Rohlfs recorded

a decline in 1866. Foureau claimed to have found the northern limit of the lake the same as it was in 1851 according to Barth. From 1902 to 1909 the lake was very low, but, according to M. Chudeau, it is said to have regained its former limits between 1910 and 1916. Mr. G. J. F. Tomlinson,²⁶ however, writing in 1916, records that Seyoram, which in Barth's time was an inaccessible island, had become at the time of his visit a peninsula on which Budumas, Kanuri and Kanembu held a market. There is a mass of contradictory evidence of a similar kind.

Owing to the extraordinary flatness of the bed of the lake its surface area is very easily affected by outside influences. The lake has nowhere been found to be more than twenty feet in depth, and is generally much less. The bed of the lake in the south is so extremely flat that a shrinkage of a few inches in the surface level makes a sensible difference in the area of the lake. An average Harmattan wind causes the water to flow two hundred yards over the land, but when blowing strongly it drives the water as far as two miles beyond the normal shore-line. In view of the extraordinary sensitiveness of the lake and the fact that the surrounding region, like many other parts of the world, is subject to large annual fluctuations of rainfall, occasionally culminating in severe drought, it will be seen that the records of explorers quoted by M. Chudeau are of little scientific value. It may also be added that we are still without a satisfactory explanation of the surface fluctuations which have been observed in certain European lakes as well as in the Great Lakes of Central Africa. The French have now established a gauge at Bol,²⁷ on the shores of the Lake Chad. It has not been in use for a sufficient length of time for its readings to be of much value at present, but in years to come these records are sure to be of very great interest.

The extent and depth of open water in Lake Chad varies considerably with the season. According to an official report dated 1908, "on the east the lake is being filled up by the sand blown from the desert, aided by luxuriant growth of vegetation. On the south the loss in area is principally due to the dropping of the surface level. The presumption is that the rainfall is decreasing, partly no doubt in consequence of the deforestation

of the country which is aided by the annual burning of grass and bush by the natives." Boyd Alexander who made himself exceptionally well acquainted with the lake was of the contrary opinion. "There is an idea," he wrote, "that the lake is drying up, but except for the loss of water caused by the disappearance of the Bahr-el-Ghazal, my opinion is that it does not alter very much."²⁸

Colonel Tilho and others have definitely proved that in geologically recent times the Chad region formed part of a great inland sea which, owing to crustal deformation, climatic change, or other causes, has shrunk to the more modest proportions of the present lake. We are still without sufficient data to prove that in historic times progressive desiccation or other causes have produced any permanent change in the character of the lake. Although many Europeans have visited Lake Chad during the past ten years there is nothing to add to the following conclusion arrived at by Colonel Tilho in 1910: "It is impossible to formulate a law governing the rise and fall of this sheet of water. There is, however, no reason to suppose that the lake is likely to disappear. It will remain for a long time still in the centre of Africa, now dilated, now contracted."²⁹

In our present state of knowledge of Lake Chad, we find no evidence for or against the alleged encroachment of the Sahara on the Sudan. Various travellers, however, have remarked on the increase of aridity in the Chad area, especially to the north of the lake. "Most of the water holes north of Chad have dried up during the last few years, and the desert has appreciably advanced towards the boundary of Northern Nigeria."³⁰ Major Hans Vischer ascribed this advance of the desert to the depopulation of the country. Similarly Lieut. Roncaud found that wells were falling into disrepair owing to the prevailing insecurity.³¹

Between Lake Chad and Kordofan there lies that section of the Sudan of which we know least. Its inaccessibility and the hostility of powerful Moslem chiefs, delayed, till recent years, the effective occupation of this country by the French and British. As Wadai and Darfur become better known, perhaps we shall find that the symptoms of desiccation, which characterise so much of the Western Sudan, are also present

here. Indeed, it already seems that they are not altogether absent. In the Central Sudan, as in Senegal and in Northern Nigeria, there appears to be a general trend of migration from the north southward. Dearth of water, and the failure of crops since the French occupation, have caused exceptional migrations on the part of the Bideyet of Ennedi, a barbarous and uncultured people who have come south from their native mountains in search of new pastures, demanding the hospitality of the French in Wadai.³² Lieut. Ferrandi, writing of this region, draws particular attention to the occurrence of isolated sycamore and tamarind trees, which he describes as "vieux témoins d'un passé probablement moins sévère que le présent."³³ Nearly thirty years ago a great drought threatened to compromise the very existence of Abeshir, the capital of Wadai, and, of course, caused great restlessness amongst the natives. Again, in 1913, the drought which caused so much distress further west proved especially fatal to Wadai. It has been estimated that between half and three-quarters of the population perished from famine in the following year. Great numbers of natives were driven to migrate southwards. In 1872 Nachtigal estimated the population of Wadai at over two millions. It has subsequently sunk to three hundred thousand.³⁴ Although severe droughts may produce widespread distress, and cause an upheaval of a population which seldom carries over a surplus of food supply from one year to another, they are of no great climatic significance. Many parts of the world which enjoy what appears to be a stable climate are subject to droughts of varying severity. There seems to be an impression, however, that in Wadai droughts are occurring with increasing frequency.

MM. Gautier and Chudeau, both eminent authorities on the Sahara, are two formidable opponents of the theory of the encroachment of the desert on the Sudan. In the deeply eroded river beds of the northern fringes of the Sahara and the ancient fixed dunes of the Sudan M. Gautier³⁵ finds proof enough that in the north the desert has followed the steppe, and in the south the steppe has followed the desert. This is no proof, however, as M. Gautier seems to think, that the present tendency is in the same direction. M. Chudeau³⁶

as the result of an examination of the dead *ergs*, fossil dunes and drainage system of the Sudanese Sahara, maintains that the Sudan is encroaching on the Sahara. He admits local instances of desiccation in the Sudan, but dismisses them lightly as due to slight climatic oscillations, "comme on en connait partout," and to which he attaches no importance. In more recent years M. Chudeau seems to have modified his views slightly, but he still maintains his contention of increasing humidity in the Sudan.³⁷ He quotes the more extensive rainfall records of the West Coast ports which indicate increasing rainfall, but it has been shown in America and elsewhere that it is not unusual to find a decrease in rainfall in one region balanced by a corresponding increase in a contiguous region. Dr. Falconer shares the same views as MM. Gautier and Chudeau, and for the same reasons. All three are geologists.

The evidence of increasing aridity in the Sudan, especially in Senegal and Nigeria, would seem to be sufficiently convincing. In an aggregate of years, rivers are found to be less subject to flood, lakes dry up, wells shrink and fail, farmers complain of decreasing yields, and finally there is a gradual movement of the people from the north southward. It is the conviction of those who are in intimate contact with the natives that this dislocation of the population is entirely due to the encroachment of the Sahara.

The division of opinion is not altogether surprising. It is probably due to the difference in point of view between the geologist and the administrative official. The field geologist in so vast and imperfectly known a country as the northern half of Africa is required to range over great areas; he seldom has an opportunity of becoming intimately acquainted with any single district, and the scarcely perceptible processes of nature such as the gradual shrinkage of wells, lakes, and even rivers, are not unlikely to escape his notice; nor is he called upon to solve the problems arising out of the consequent dislocation of the population. Moreover, in his training, and in the exercise of his profession, mere decades, and perhaps centuries, are periods of time of no great significance. The local official, on the other hand, is usually required to serve for long periods in very limited areas, with which he becomes

intimately acquainted, and with the inhabitants of which he is in constant and intimate contact. Under his eye the slight processes of nature, especially when connected with the vital question of water-supply, are far less likely to escape observation. It is chiefly from this source that springs the ever-growing mass of evidence of increasing aridity. Unfortunately almost the whole of this evidence lies inaccessibly hid in the files of provincial offices.

There seems to be a fairly general agreement that in the past there have been climatic oscillations in the northern half of Africa. It is further agreed that in former times conditions more arid than those of to-day prevailed over much of the Sudan. The division of opinion concerns the present climatic trend. Local observers maintain that the present tendency is for the Sahara to encroach on the Sudan. MM. Gautier, Chudeau and Dr. Falconer, on purely geological grounds, maintain that the contrary is the case. May it not be that the geologists, owing to the breadth of view with which they regard both space and time, have overlooked a minor oscillation, namely, the present widespread tendency towards increasing aridity?

M. Henry Hubert, also a geologist, appears to be the only man who has made anything approaching a detailed study of the alleged encroachment of the Sahara on the Sudan. If for no other reason than this the results of his very careful investigations in Senegal, which have been briefly described above, merit close attention. The value of his conclusions is proved by the fact that they are consistent with the evidence advanced by both the opposing parties in support of their respective contentions regarding the desiccation of the Sudan. M. Hubert is in agreement with MM. Gautier and Chudeau regarding climatic oscillations in the past, but he denies their contention that the present tendency is towards increasing humidity. In this, however, he is in entire agreement with the experience of the natives and the opinion of local observers whose conclusions are based on evidence which, although of very great value, appears not to have been properly appreciated by MM. Gautier and Chudeau. His valuable conclusions, which apply equally to the Northern Provinces of Nigeria,

and perhaps to many other parts of the Sudan, may be briefly summarised as follows :

(1) At a remote epoch there was a period when the Senegal region was well watered, but to-day this region has become so arid that the livelihood of the natives has become precarious.

(2) The change from more humid conditions to the aridity of to-day has been marked by climatic fluctuations of dry and wet periods *always with a total effect of ever-increasing aridity.*

(3) During a very short period so rapidly has desiccation progressed that its effects have been noted by actual observers on the spot.³⁸

It is obviously impossible to calculate the probable duration of the present tendency towards increasing aridity. If M. Hubert is correct in the second of his conclusions it will continue till the Sudan again becomes a region of shifting dunes, a process which must occupy an immense period in human history. Although the control of desiccation lies at present far beyond the power of man, much may be done to modify its evil effects. The necessity for this is not generally recognised.

The encroachment of the Sahara on the Sudan is not a mere matter of geographical interest. If the process continues the political consequences may become a matter of some urgency. We have already seen that in Senegal, Nigeria and Wadai, there is a perceptible movement of natives from the north towards the south. Nomads from the fringes of the desert are appearing in more southerly districts where their herds have not been accustomed to graze. These migrations, which are at first seasonal, later give way to permanent occupation of the new pastures. Simultaneously there is the continual movement of the agricultural community also southwards, a displacement entirely due to increasing aridity. Should the freedom of movement at present enjoyed by the farmers be arrested or even curtailed serious complications may result, for the pressure of spirited pastoral tribes on a sedentary

agricultural community must inevitably introduce a dangerous element of unrest.

To ourselves the region of especial interest is the northern frontier of Nigeria. As the French themselves have pointed out, their military occupation of the restless border zone which lies between British territory and the Sahara, serves merely to guarantee the integrity of our frontier. No doubt the following passage will command the sympathy of those who believe in the encroachment of the Sahara on the Sudan and appreciate its possible consequences: "*De maigres effectifs s'échelonnaient et sont toujours dans les postes qui en fixent les points principaux aux lieux d'effervescence possible, avec l'ironique destin de garder les confins du pays anglais, d'y faire la police en assurant qu'aucune incursion venue de notre domaine n'aille troubler les agents de la Nigéria.*" ³⁹

Whatever may be the causes which combine to produce desiccation it cannot be denied that in the Sahara and the Sudan man himself is a contributory factor of some importance. The encroachment of the desert on its oases is largely due to the constant strife between the tribes and factions of these inhospitable regions. General insecurity has led to the reduction of the agricultural communities with the result that in the cultivated areas there has been less and less opposition to the desert which has crept in and all but won the day. The French have in recent years done much to remedy this state of affairs. By his vigorous policy of allowing no act of pillage to go unpunished the late General Laperrine succeeded in establishing law and order in many turbulent regions, and we already hear of increasing prosperity in the oases, and the reversion of nomads to an agricultural mode of life. Much still remains to be done in the policing of the Sahara.

We, for our part, have a no less difficult task to perform. The destructive hand of man is as active an agent of desiccation in the Nigerian Sudan as in the Sahara. We have already dwelt at some length on the evil ways of the shifting cultivator. The establishment of forest reserves has done something to limit his depredations, but the only real remedy for deforestation lies in the introduction of some system of permanent

cultivation. To this end much may be done by the development of irrigation and rotation of crops, but at best so great a change in the native methods of agriculture must take a very long time to achieve.

E. WILLIAM BOVILL.

Mr. F. W. H. Migeod, writing recently from Mosaka on the Congo, says that "the desert is reckoned to advance 200 metres a year, which gives 300 kilometres or 180 miles in 1,500 years, and is a reasonable estimate" ("West Africa," August 14, 1920). Mr. Migeod leaves us to infer that these figures apply to the southern fringe of the Sahara generally, though he doubtless has in mind some definite district, for it is notoriously dangerous to generalise in matters relating to desiccation, which is a process very dependent on local circumstances.—E. W. B.

²³ Capt. C. H. Stigand. *Geographical Journal*, Vol. 45, 1915, p. 513 *et seq.*

²⁴ Dr. J. D. Falconer. *The Geology and Geography of Northern Nigeria*, p. 210. London, 1911.

²⁵ R. Chudeau. *Annales de Géographie*, XXV, 1916.

²⁶ G. J. F. Tomlinson. *Geographical Journal*, Vol. 47, 1916, p. 62.

²⁷ *Geographical Journal*, Vol. 42, p. 297.

²⁸ Boyd Alexander. *From the Niger to the Nile*. London, 1907.

²⁹ Capt. Tilho. *Geographical Journal*, Vol. 36, 1910, p. 278.

³⁰ Hanns Vischer. *Geographical Journal*, Vol. 33, 1909, p. 259.

³¹ *Renseignements Coloniaux*, 1911, No. 10.

³² Lieut. J. Ferrandi. *Abéché, Capitale du Ouadaï*, p. 23. Paris, 1913.

³³ *Ibid.*, p. 6.

³⁴ Colonel Tilho. *Geographical Journal*, Vol. 56, 1920, p. 245.

³⁵ E.-F. Gautier. *Sahara Algérien*. Paris, 1908.

³⁶ R. Chudeau. *Sahara Soudanais*, pp. 244-255. Paris, 1909.

³⁷ R. Chudeau. *Annales de Géographie*, XXV, 1916, p. 455.

³⁸ Henry Hubert. *Annales de Géographie*, XXVI, 1917, p. 384.

³⁹ Lieut. C. Jean. *Les Touareg du Sud-Est l'Air*, p. 11. Paris, 1909.

Mr. Frank R. Cana's numerous contributions to the *Geographical Journal* have proved most helpful in the preparation of this paper.—E. W. B.

ACROSS AFRICA ALONG THE EQUATOR

I LEFT England early in November, 1919, for an object I had long planned. That was a journey straight across Africa.

After some consideration I had decided that the Equator was likely to offer as many subjects of interest as any other given straight line. This route would enable me to pass through the Bantu-speaking tribes, which I specially wished to compare with the West African tribes, as well as touch some of the Nilotic tribes. I should also be able to see Pygmies in various localities along the route; and I might also, if I were lucky, meet some of the larger anthropoid apes. I felt, too, that to establish what was on the Equator in its whole length would be of considerable interest in itself. With this programme sketched out, and the not less important considerations of outfit for the expedition settled, I took my departure from England, as stated above, and eventually reached the East Coast of Africa in December, 1920.

It is, of course, evident that to travel on an absolutely straight line across a continent is scarcely practicable even if one possessed unlimited financial resources, so many are the obstacles that would have to be overcome. My plan was, therefore, to select a number of points on or close to the Equator, and travel from one to the other by the route, either to the north or south, which promised to offer the most numerous subjects of interest. With a few exceptions, I was able to do this.

Passing through French Congo took me five months. I was about four months in Belgian Congo on my way across, and about two months on the return journey, and I had reason to be very grateful for the many facilities for travel and study which the local administrations afforded me.

I went through Gaboon first. This was the wildest and most undeveloped part of Africa that I passed through.

Travel here was not always without difficulties. The rainy season had begun, and many rivers and swamps presented considerable obstacles. Cleared roads are few, for the reason that the French Government has not up till now taken the development of the country in hand. Vast areas are the exclusive concession of large companies which do no more than is necessary for their restricted trade. The Ogowe river, which is the principal waterway, is, above Ndjole, an endless succession of rapids for most of its course, and travelling along it is far from comfortable. On long sections there is a very scanty population, and so not much of interest. However, one's interest in another way is stimulated by endeavouring to secure the safety of one's baggage every half-hour almost. Fish in the river are plentiful. There is a small amount of bird life. We saw the tracks of the Pygmy Hippopotamus on sandbanks where the canoe-men, Fangs, used to hunt for turtles' eggs. Apart from these there was nothing.

All the natives along the banks are very uncivilised, but on reaching the Aduma country one finds a great difference. It is curious to arrive after over a month's journey in a little oasis of civilisation, with natives wearing cotton garments instead of woven fibre, and having outwardly some pretensions to civilisation. This is because the Aduma people have a virtual monopoly of the canoe traffic in all the upper river above where steam navigation ceases to be possible. They make a lot of money, and could make much more, for their skill is unrivalled, were they a little more energetic. It is this failure which enables other tribes, although less skilful watermen, to get a footing in this profitable trade.

Immediately beyond the Aduma are the Bakota, a rather fine tribe, warlike, and with strong cannibalistic tendencies. The name Bakota itself is said to mean "the fine ones." The Babamba next to them are a somewhat similar race, but most of the other tribes are inferior physically.

All this region, which is dense forest, lies on the borders of the French administrative areas of Gaboon and Moyen Congo. Very few Europeans pass through, and large numbers of the natives have never yet paid the poll-tax. The last European attempting to cross the watershed between the

Ogowe, which drains directly into the Atlantic, and the Likuala, which drains into the Congo, had been killed in 1912. There had been a patrol through in 1914, and till my visit the country there had seen no Europeans. The natives were, however, most friendly. Travelling here presented numerous difficulties. The paths in the dense forest were of the faintest, and a guide was necessary from village to village for some days. The flooded rivers and swamps also often caused long delays before all my caravan could get over. Where there was jungle growth it was frequently necessary to hack a way, and it was not always possible to reach a village by nightfall. The natives all carry their loads on their backs, which is, as a matter of fact, practically necessary, as it would usually be impossible for a man to carry a load on his head, owing to the obstructions of vegetation. We frequently had to travel long distances almost on all-fours. This mode of carrying is inconvenient as regards boxes lightly packed, for everything gets shaken up; and it is hopeless to try to preserve opened tins of provisions. A further trouble, too, is the long delay in tying up the loads into crates—made of palm stalks—to hang on their backs. Of imported cotton clothing in this region one sees none. In every village small squares of raphia fibre cloth, about eighteen inches each way, are woven on looms. These are worn sewn two or three together. All the tribes, the Shake especially, are very clever at making knives of fancy patterns, but all the way between the sea and this region most of the arts seem lost, including that of making pottery. A native-made pot is unknown; all are imported. No hoes are used for farming, the imported cutlass or machete taking its place in all operations connected with tillage. It was not till I reached the Aduma that I saw a small sort of flat trowel, used by the women for digging up ground nuts.

Cassada (manioc) is the principal article of food everywhere, and in a large part of the Ogowe basin is the sole article. So indolent are the natives in some parts that the Government has to compel them by means of police sent to the villages to grow enough food to last them the year. All the planters in the lower country complain of the difficulty of buying food for their labourers. This, however, is not in my opinion a reason-

able complaint, as every plantation, besides growing its crop of coffee, cocoa, or whatever it may be for export, ought to grow enough foodstuffs to be self-supporting. It would be a great inducement to labour from poorly fed areas to come and work. There is possibly no greater inducement in existence than that of better food. As to cocoa, it does not grow well in Gaboon, and the old plantations are reverting to coffee. The Gaboon forest is very rich in valuable timber trees, and there are numerous species which bear edible nuts of which the natives make much use as food. The nuts of one kind (*Irvingia gabonensis* of the *Rutaceæ*) are collected, and, after being split, the kernels are pounded together into great whitish blocks weighing often half a hundredweight. The collection is in the hands of the women, and little camps are made in the forest far from villages. This food is called "chocolate" by French-speaking natives.

I spent a considerable time in the parts of the forest where the gorilla was supposed to be, but without result. None could be found, which was disappointing; and though many chimpanzees could be heard calling at night, I never heard a gorilla nor saw its tracks. There are in these forests many large apes, some of great size, and perhaps akin to gorillas. Some are very ferocious, and the natives do not differentiate very closely between them, as they are rare, and so the majority do not have much opportunity to study them. The skulls are usually preserved in the villages, but, as I found very few, the number of these animals that are captured or slain is not many in a year. When at Okonja, which is on the watershed region between the Ogowe and Likuala, I was told of two species of gorilla in the forest. They are apparently not exceptionally large. One species was red and the other black; and the latter was said to be most ferocious and dangerous. I obtained a skull of the latter, and also skulls of other gorillas and anthropoid apes whilst in the territory.

All the lower river tribes are feeble and decadent, not excluding the Fang, who are the latest immigrants. I came across several examples of what is virtually racial suicide. This has no connection with individual suicide; in fact, the ideas are almost contrary to one another. It seems as if the

tribe were either unwilling or unable to continue its existence. In some cases the women refuse to bear children for fear of spoiling their figures; and the men have no desire for children either. Other tribes, as I have said above, have to be forced by the Government to grow enough food for their sustenance. It is curious that tribes which, like the Fang, and the Bakele before them, are steadily pressing down to the coast, become feebler as they advance, and seem to die out almost within sound of the waves.

Nutrition enters very largely into the life history of a tribe, and everywhere one finds the tribe that lives on one article of food only, such as cassada, the feeblest physically and mentally. The most vigorous tribes are those which have had an abundant diet of human meat, such as the Bakota.

In the greater part of Gaboon the tribes are largely nomad, and a village can be seldom found after five years' existence. The inhabitants move elsewhere as a whole community, or break up into separate families and each builds a new village. Their destructive methods of farming are largely responsible for the move, but, as the houses are only of thatch roofs and mat or bark walls, it is easier to build on a new site than to repair.

In crossing the watershed to the Likuala, and so on to the Congo river system, one rises to about 3000 ft., with a cooler climate and distinctly cooler nights. I found on the way some tree ferns in two very small upland swamps, and this was the only occasion on which I found tree ferns. Another curious fern in the same region, which I subsequently found elsewhere, as also another (*Microlepia speluncae*, T. Moore. *Dryopteris protensa*, C. Chr. *Nephrodium subquinguefidum*, Hook), was one that turns its fronds over, so that the side one would expect to grow upwards grows facing the ground. Of the places in Gaboon in which I made a stay the richest in ferns seemed to be Boue.

I eventually reached navigable waters after twenty-seven days without meeting a European, and thence was able to do the sections of my journey between halting-places by canoe. When near the Congo I met a steam launch which took me to Mosaka on the Congo itself.

The internal trade of Gaboon and Moyen Congo is in the hands of two great concession companies. So small is the purchasing power of money for buying imported goods that it does not pay the native to work for it. All he does is to collect enough produce in the bush to earn his five francs poll-tax. This collected and sold at the factory, he goes over to the Poste, pays it in and gets his tally or receipt; and he is clear till next year. He can then return to the occupations of his own village, which, besides weaving and hunting and clearing the bush for the women to make the farms, consists of little else. With the high price of imported goods, due to the monopoly in the hands of the Concession companies, the long transport raising prices as well as the fallen exchange, all imported goods are quite beyond the natives' means. Untouched by trade, he must necessarily remain a bush animal.

The second section of my journey began when I reached the Belgian Congo. The area comprised by this mighty river and its immediate affluents is probably one of the richest in the world, certainly the richest in Africa. The river for a considerable part of its course is as much as ten miles wide. This is the part on its northern bend where it flows through a great plain covered with dense forest. Nearer the sea it is narrower and flows between high hills mostly bare of forest, except in the valleys. It is only at Lukolela that one can get a glimpse of both banks at once in the broader part. Here the width is about seven miles. For the rest the river flows through endless forested islands long and narrow, with the channels between from a half to a mile wide. The banks have few villages, except where there is high ground or the necessary wooding stations. In consequence, the river journey is most monotonous.

The first great centre in Belgian Congo I arrived at was Coquilhatville. This place is chiefly celebrated for the magnificent botanic gardens at Eala, about five miles away. It is a great experimental station, and the development of the Congo colony owes much to it. Apart from this, Coquilhatville is a great produce-collecting centre, the produce—palm oil, palm kernels, gum copal, etc.—coming down the large tributaries that debouch into the Congo near here. There is

a considerable European population, and fresh food supplies are scarce and dear, as they are in all the big Belgian towns.

Having reached Stanleyville, which is the best laid-out and most agreeable town on the Congo river, and with a large European population, I started on the three months' journey with carriers to Uganda. For two months the route lay through the dense forest, where the trees seemed to me exceptionally tall. The Belgians have made a good track through it, and are requiring the natives to leave the bush and settle along it. This facilitates administration, the maintenance of the road and rest-houses, and ensures a food-supply for travellers. The rest-houses are usually very good. The caretaker or chief of the village, in the small villages usually the same person, is required by the Government to bring food to every European on arrival, as well as wood and water. The food is according to scale and paid for by scale. The authorised allowance is one fowl, five eggs and any vegetables that may be growing. To grow them is compulsory, and seeds are supplied free at fixed periods. Food for the carriers has also to be brought. This is an excellent system. One of the chief difficulties in travelling, viz., finding food on arrival, is thus obviated. It has to be brought without being applied for.

I was able to come in contact with a good many Pygmies. They are not so small as is commonly supposed, and it is curious how near all of them are to a standard height measurement. Whether in Gaboon on the west, or here in the Ituri forest on the east, they averaged about 4 ft. 8 in., and the women a little less. One reads of their being 3 ft. 6 in. or less, but I saw none of that small size, nor could I hear of any so short from any authentic source, though, of course, they may exist. They are of two races, distinguished by different shades of colour. One hears of yellow Pygmies, or "red," as they might be called. I saw a good many, but they are by no means so fair as I had been led to expect. I also noticed some other distinctions amongst them. Mixed up with other natives of the forest one often has to look twice to pick them out. Some of the tribes, such as the Bakumu and Balese, are half Pygmy. There is the tall element in them as well as the Pygmy element, but they all speak the same language.

With other tribes, the Pygmies merely form a pact for the exchange of meat for vegetable food. The meat they obtain by hunting, their skill in hanging on to the tracks of the beast they mean eventually to kill being by all accounts very wonderful. It is said even that they decide before going out what particular animal of a species they will hunt. Fishing is a pursuit entirely strange to them. They hold themselves under no obligation to one tribe only, but will sever their connection whenever it suits them. They universally claim to be the ancient and rightful owners of the land.

As to an independent Pygmy language I obtained no direct evidence, and, owing to difficulties of interpretation, I was unable to ascertain how accurate or the reverse is the speech of the Pygmies who use the language of their neighbours, and whether they have many words of their own. Such a study would require long residence and a very complete knowledge of the local language. A Pygmy whom I talked to in Gaboon said his grandparents who lived far to the north spoke formerly a different language from that which he himself used, which was Fang. It does not follow, though, that the language they used before this migration was one entirely peculiar to themselves.

I also came across some few Maṅgbetu, though I did not pass through their country. This tribe has the very peculiar custom of artificially distorting the shape of the head. The infant's head is bound round with fibre until it attains an elongated, almost sugar-loaf, form. I made numerous inquiries from Europeans who had come in contact with them, whether this procedure affected the mentality of the individual. Although a few seemed to think it did, and unfavourably, the majority considered it had no effect. In any case, the Maṅgbetu are one of the few tribes with an aptitude for work.

Pacts of a similar nature to those formed by the Pygmies with other tribes are found among the negro tribes themselves as well. The agreement may be made when one tribe possesses an article of food, or an art which a neighbouring tribe desires to possess also. If the latter has something adequate to offer in exchange, an alliance on equal terms may be made, and the united tribes thus acquire a great accession of power. Other-

wise the alliance is made on terms of suzerainty on the one side, and of qualified subjection on the other. The submerged, in the course of time, may tend to lose their identity, but the process may be long, and generally depends on intermarriage. Conquest in war rather tends to the complete elimination of the conquered. If not, independence may be re-acquired. Examples of these working agreements are found between cattle tribes and aboriginal agricultural tribes, as well as amongst others.

It was a relief, in spite of the anthropological interest of the forest, to emerge into the grass-land, the first glimpse of which between the trees on a high hill was a real pleasure. It culminated at Irumu with its milk, butter and beef.

F. W. H. MIGEOD.

(To be continued.)

THE PRESERVATION OF SPECIES IN AFRICA ¹

I HAVE made many dives, for the most part not very deep, into the north and east of the African Continent. The first was nearly sixty years ago in a dahabeyah up the Nile. There was no Suez Canal then, and no steamers, unless it was one tug owned by the Khedive. At that time the Nile from Cairo to Assouan was swarming with immense flocks of geese and ducks, as well as long strings of pelican, flamingoes, and other waders, and several species of ibis, including the sacred ibis, now, I think, only found to the north of Khartum. A British sportsman, well equipped with shallow skiffs and heavy duck-guns, boasted to me of having killed two thousand geese. It is not surprising that little wild life except land birds are now seen in the course of the stream until Khartum is reached. It was, perhaps, to be expected, but it gives one a shock on revisiting the ancient stream. This opened my eyes as to the difficulty of reconciling the advance of civilisation with the preservation of species.

I am not out to suggest the multiplication of animals, whether the herds of the greater game, or lesser creatures, to provide a holiday for the sportsman, but I submit that the wild life and varied fauna of Africa is an Imperial asset, and worthy of preservation, and I may remind you that some interesting species of large animals have totally disappeared in the past 150 years—*e. g.* the Quagga and Blue-buck. What would posterity think of us if we allowed this process of the steady elimination of species to continue? The feeling of the moment against the world-wide slaughter of beautiful birds

¹ This paper was read at a Meeting of the Society held on 4th May, 1921, when Lord Buxton occupied the Chair. For report of proceedings on this occasion see page 287.

is a measure of the volume of resentment which would be aroused. It is of vital importance that those who have local control should be long-sighted enough to take the necessary measures while there is yet time.

The Society for the Preservation of the Fauna of the Empire seeks to focus these views not in England only, but to the utmost limits of the King's dominions, where, indeed, it has many warm adherents. Even outside the Empire, notably in the United States, where it was greatly re-inforced by the late Theodore Roosevelt, even more active measures and securities have been sanctioned by law. In the U.S.A. there are national reserves, efficiently patrolled, where no gun is allowed, forest reserves which are incidentally refuges for birds and animals, and nesting "rookeries" of certain birds, and many other safeguards. Some of these are national and some the outcome of State legislation on the subject. The Americans have been well warned by the total annihilation of the American bison in a wild state, owing to want of foresight. Canada is perhaps the most long-sighted of our Dominions in the provision of large Reserves in well-chosen areas.

In Africa, wherever there is a considerable population, on the other hand, the advocates of a protective policy are up against the influx of settlers and the increase of cultivation and pasture, whether occupied by white or black cultivators, and the claims of these to be protected cannot be disregarded. But with every desire to be impartial, I fear that a great deal of needless and reckless slaughter, which is anything but good sportsmanship, takes place--at least I am so informed by responsible people. One friend, who is a good sportsman and has a farm in East Africa, and upon whose judgment I rely, writes, "The destruction is now terrible." I am afraid this might truthfully be repeated in other districts.

In all British possessions in Africa, whether colonies or protectorates, there are well-considered game regulations. Control is, no doubt, difficult, and I fear there are many infractions which go unpunished. This is sometimes the case where there is a limitation of numbers which may be killed of each species on a licence by a sportsman--an excellent rule. Formerly the numbers of each species killed under licence were

published periodically. It was a valuable record and should be *de rigueur*.

Again, there is such a thing as a competition in trophies. A licensee is anxious to secure fine trophies, and if, after getting the permitted number, he sees a finer head, there is a temptation, sometimes yielded to, to secure it and leave behind the poorer horns. For this reason, I deprecate the practice of measuring heads against one another, as if an inch more or less were a question of skill and sportsmanship. Many local administrators foresee the danger of the complete disappearance of the wild fauna of their area, but others are less alert.

In the opinion of most of those competent to judge, Reserves which are permanent, and not close to towns or much cultivation, are the most promising means of preserving the species. I refer to certain typical African reserves from the point of view of the increased difficulty of maintaining them when settlers pour in and establish themselves in the immediate vicinity.

The Addo Bush Reserve was designed to shelter the last herd of South African elephants. Since the date of its establishment many settlers have arrived, and there are large areas of cultivation in its vicinity. There is a shortage of water within the Reserve, and the elephants break out to get it. Outside the water is contained by dams to which, as well as to fences, they do great damage, and also to the crops. It would appear that drastic reduction of the herd was a practical necessity under the altered conditions, and the Dominion Government so decided, and only a small fraction of the elephants now remain.

I must call attention to the Umfalosi River Reserve in Zululand. There is an increase of population, many soldiers having been settled on the adjacent land. Recently a large organised band made a raid and drove right through the Reserve and destroyed 3,000 head of large game, and it is certain that an unknown number of wounded remained to die. Not even the small remnant, at most ten, of the white rhinoceros was spared, though this little band, some of which were killed, were the only remains of the species south of the Equator. No official regret, that I have heard of, has been expressed for such an act of irresponsible lawlessness.

Far away to the north-west lies Lake Chad. The lake is subject to periodical rises, which flood a belt of fertile land which is cultivated. The Lake Chad Reserve is close to it, and many large game invade the cultivation. It is proposed to abolish this reserve and substitute another not open to the same objections. I for one cannot argue against this measure when faced by a serious diminution of the population, caused, it is said, by the depredations of elephants.

At the same time, if there is to be a reconsideration of the policy of upholding the Reserves as they are, there should be careful foresight in the selection of areas, which should then be regarded as sanctuaries, and should be well controlled by competent rangers, and not subject to change or diminution of area, the question of adequate water and grazing being prime essentials.

I desire to recall the International Conference which sat in 1914 to consider the best means of preserving the race of elephants, which unanimously recommended to their respective Governments the prohibition of the export of tusks under 10 kilos. in weight. This would have tended to have preserved the great majority of female elephants as well as the young, but, owing to the War, this recommendation never took effect. It should be remembered that since then the value of ivory as an article of commerce has been enormously enhanced, and this has increased the temptation to hunters to procure it at any risks. It is high time, in my judgment, that some such steps should be reconsidered by those Powers interested and controlling African territories.

I do not propose to enter at length into the vexed question of whether even the complete destruction of the larger wild animals would rid Africa of the disease of sleeping sickness in man and anthrax in animals, but I was a member of the departmental committee which was appointed several years ago to inquire into the part played by big game and tsetse flies in the spread of trypanosome infections of men and stock, and I heard the evidence of many experts and competent observers. In Uganda it was the tsetse called *palpalis* which is most in question. The disastrous epidemic at the beginning of the century caused the death of 200,000 natives.

It was checked by the removal of all natives from a belt round the Uganda portion of Lake Victoria. The pathogenic germ is said to have been introduced into Uganda comparatively recently from the west coast. Possibly this is the reason for the terrible mortality which ensued in the neighbourhood of the Lake Victoria and in other parts of Uganda. If the disease was a new one, it might be expected that there would be a high degree of susceptibility. Further south, in Central Africa and Rhodesia, the *Glossina morsitans* is believed to be the carrier. The disease has been recognised for a long series of years and has probably been endemic for centuries. This fly is very widely spread where there is dense bush, but the sleeping sickness for which it is held responsible is not epidemic in character, only 260 cases having been reported in this very wide and populous territory in six years, 1908-1914. It would seem, therefore, that there must be a large number of human beings, both black and white, who have been repeatedly bitten by infected flies without any bad effects. Such human beings must therefore have a certain measure of immunity. In other words, they may be reservoirs of the disease without showing any symptoms of it.

It seems to me that under these circumstances man himself might distribute the disease even if the whole of the game animals were eliminated. I am not satisfied that there are not other reservoirs among lesser mammals, birds and reptiles.

The above-named Committee reported at length, and among their conclusions were the following :—

“ Knowledge of the disease, its cause and its remedies is still in the making, and hasty and imperfectly considered action of a drastic character, such as the attempt to effect a general destruction of wild animals, is not justified by the evidence before your Committee.”

And, on the other hand, that “ measures of clearing [of the bush near villages and along trade routes] should be undertaken where they are practicable, and would tend to check the spread of the disease and render life in settlements and travel by road safe for men and stock.”

EDWARD NORTH BUXTON.

MEETINGS OF THE SOCIETY

A MEETING of the African Society was held on Thursday afternoon, April 21, 1921, at 5 p.m., at the Royal Society of Arts, John Street, Adelphi, when Mr. Robert Williams read a paper on "The Cape to Cairo Railway," which was afterwards illustrated by kinematograph and lantern illustrations.

The Earl Buxton, G.C.M.G., President of the Society, presided, and amongst those present were :—

H.E. the Belgian Ambassador in London (Baron Moncheur), the Portuguese Minister (Senhor M. Teixeira-Gomes), Monsieur M. Lippens (the new Vice-Governor-General of the Belgian Congo), Mr. J. C. Agius, Mr. J. W. Allen, Mme. B. de Balan, Sir Cecil Budd, Mr. L. S. Bristowe, Sir T. Fowell Buxton, Bart., Sir George Denton, K.C.M.G., Sir Howard d'Egville, K.B.E., Miss A. d'Egville, Mr. R. Espeut, Mrs. Gordon Fisher, Sir Douglas Fox, Mr. F. Douglas Fox, Sir Francis Fuller, K.B.E., C.M.G., Sir Henry Galway, K.C.M.G., Sir W. N. M. Geary, Bart., Mr. J. Withers Gill, O.B.E., Capt. J. F. Godman, Mr. R. C. Hawkin, Lt.-Col. H. Marshall Hole, Mr. G. C. Hutchinson, Mrs. Hutchinson, Sir George Lawson-Johnstone, K.B.E., Mrs. Digby Jones, Mr. T. B. Kitson, Mr. G. de H. Larpent, Mr. D. O. Malcolm, Lt.-Col. C. S. Martindale, Sir Charles Metcalfe, Bart., Mr. G. W. Neville, The Marquess of Ormonde, Mr. M. Y. H. Parkes, Mr. Victor Raulier, Capt. A. J. St. John, Mrs. W. J. R. Simpson, Rev. Edwin W. Smith, Lady Stanley, Sir Lawrence Wallace, K.B.E., C.M.G., Lady Wallace, Mr. Leo Weinthal, O.B.E., Lt.-Col. G. D. White, M.P., Mrs. Robert Williams, Sir Henry F. Wilson, K.C.M.G., K.B.E., Sir Reginald Wingate, G.C.V.O., G.C.B., Col. Sir Francis Younghusband, K.C.S.I., K.C.I.E.

The Chairman, in opening the proceedings, said :—

I think it is the custom of the African Society Chairman simply to introduce the lecturer, and to make any observations he may think advisable after the lecture. Mr. Williams is so well known that he requires no introduction from me to the British public, so I will ask him at once to proceed with his lecture.

Mr. Williams then delivered his lecture.

At the close of the lecture, which was listened to with much interest by a large audience,

The Chairman said :—

Ladies and gentlemen, before we part I am sure you would like me, on your behalf as well as on my own, to express our great gratitude to Mr. Williams for the lecture which he has been good enough to give us this afternoon. But before doing so I should like, as President of the African Society, to express on behalf of the Committee, our satisfaction at seeing such a good attendance this evening, and incidentally inform you ladies and gentlemen who are not Members of the Society, that it is without exception the best Society in the world, that you ought to join it, and that the address is The Imperial Institute, South Kensington.

It gives me great gratification to know that, on the present occasion, we have attending Mr. Williams's lecture, on my right the Belgian Ambassador, and on my left the Portuguese Minister. We desire to extend to their Excellencies our very warm thanks for their presence this evening, and to express to them, as I am sure we all, English men and English women, desire, the great obligation under which we were laid to them during the war, and the feeling of friendship and of affection which we hold towards our oldest ally, Portugal, and to the ally for whom we were prepared to go to war.

We have had, no doubt, in Africa, difficulties with Portugal and with Belgium in the past, but I think those were largely due to the sinister influence of another great nation which now, thank Heaven, is eliminated from Africa altogether. And I feel quite confident that Great Britain and Belgium and Portugal will get on better and be on more friendly terms than they used to be when there was this fourth Power also on the great continent.

Now, I remember a few years ago when I went to Elisabethville that there was an uneasy feeling on the part of the Belgian authorities, that I, as Governor-General, had come there with something in my mind in connection with the Belgian Congo. I was, I am glad to say, able fully to satisfy our Belgian friends there that I had no such thing in my mind; and I am glad to think that I made such a satisfactory pronouncement that the Belgian and British community of Elisabethville presented me with a live lioness and a live leopard. I am sorry to say the leopard escaped, and I believe he is still at large; but the lioness I presented to the Pretoria Museum, and it is still there as a witness to the truth of what I said.

We have had an interesting lecture from Mr. Williams on the Cape to Cairo Railway. He calls it the Cape to Cairo Railway, but, as a matter of fact, some parts of it will be water and not all railway. But it is a great ideal, due to the imagination of that man whose picture presentment you saw just now, one of our great Empire statesmen, Cecil Rhodes, a man of wide imagination and far-reaching ideals. I greatly felt, what Mr. Williams said, the pity of it that while Rhodes

had done so much for this Cape to Cairo route he did not live to see it practically completed as it is now, he did not even have the satisfaction of seeing that portion of the railway in which he took special interest—that great bridge which crosses the Falls. You saw just now a representation of the Falls, and it is a curious thing that Mr. Rhodes never actually saw that himself. I have myself 'seen it six times, and should like to see it another dozen times.

One does feel when travelling long distances in South Africa how grateful we are to these pioneers who have made travelling easier. No doubt in the old days it was interesting enough when you had to walk. But personally, when I am going a couple of thousand miles, I prefer to go in my special train rather than to foot it the whole way, and I am obliged to these pioneers for having made access to these countries comparatively easy travel.

Mr. Williams has described, as was shown on the screen, the Kambove Copper Mines and the Smelting Works at Lubumbashi close to Elisabethville, the Belgian capital of the Katanga, a town in the country which undoubtedly, as Mr. Williams says, has very great possibilities and in some ways will probably in the future years be the centre of Central Africa. Elisabethville is a town of comparatively recent growth, and it still suffers from one disadvantage in that it has the tsetse fly around it, and when I was there I found that the only way of getting milk was from a few cows which are smuggled in during the night with flannel cloth covering them and with a gas bag over their heads so that the flies could not hurt them. But the tsetse fly is susceptible to civilisation, and as civilisation extends the tsetse fly disappears.

This capital of the Belgian Congo has access to the south, to the east, and to the north, and Mr. Williams is going to put the finishing touch to the position of Elisabethville by giving it access from the west as well.

Mr. Rhodes is dead, unfortunately, but his mantle in many ways has fallen on Mr. Williams, and he has done a vast amount to assist in the development of Central Africa. He mentioned to you the railway in which he is at the present particularly interested, that is the railway to the west, the Benguela Railway to the Portuguese territory. That railway already has made considerable progress, and I believe that, though the distance is considerable, the actual engineering difficulties that remain to be overcome are not very great. I had the advantage the other day of returning from South Africa with Mr. Varian, its Engineer, and he showed me the plans and the elevations he had made.

I think that not only may we thank Mr. Williams as representing those interested in Africa, very cordially for his extremely interesting lecture and for the pictures he has shown us; but, I think we may also thank him for being one of the most prominent of those who have done so much to develop Central Africa and to make it a place in which the white man can live. I therefore ask you to show your thanks to Mr. Williams for what he has done in the past and assure him we will watch with interest what he is going to do in the future.

The Chairman invited those present to put questions to the lecturer, but none was forthcoming, and after Mr. Williams had briefly returned thanks, the proceedings terminated.

At a Meeting of the African Society held at the Imperial Institute, South Kensington, on May 4th, 1921, at 4 p.m., Mr. Edward North Buxton gave a lecture on "The Preservation of Species in Africa."

The Earl Buxton, G.C.M.G., President of the Society, occupied the Chair, and amongst those present were:—

Mr. J. W. Allen, Mr. E. W. Bovill, Major Brown, Sir T. Fowell Buxton, Bart., Mr. Noel Buxton, Sir George Denton, K.C.M.G., Miss E. M. Godman, Mrs. G. du Maurier, Sir Alfred Sharpe, K.C.M.G., Mrs. H. A. Walker, Dr. C. M. Wenyon, Miss Alice Werner, Lt.-Col. Dalrymple White, M.P.

Lord Buxton, in introducing the lecturer, said: It is a custom of the Society for the Chairman to introduce the lecturer in one or two words, and if he has any further observations to make, to make them after the discussion. I would like to say that Sir Reginald Wingate, who was very anxious to be present, as he takes a great interest in the question of preservation of Fauna, unfortunately is unwell and unable to be present. Every one of you know Mr. Edward North Buxton by name as a great sportsman and one specially interested in the preservation of the Fauna of Africa.

Mr. E. N. Buxton then delivered his lecture.

Dr. C. M. Wenyon, of the Wellcome Bureau of Scientific Research, opened the discussion after the lecture. He said: I am sure we have all listened with great interest to what Mr. Buxton has told us about wild animals in Africa. He is far more competent to speak of the subject of their preservation than I am. I was in Africa for a certain length of time some years ago, and I do know something about the question of which he spoke last, namely, that of wild animals acting as reservoirs of disease. I am quite sure that if we were asked if the wonderful creatures that live in Africa should be destroyed we would say "Certainly not." There is a silver lining to every cloud, and I think Mr. Buxton has given us the silver lining; it is my duty to tell you something of the cloud itself. He mentioned the fact that these animals act as reservoirs of disease, that is to say, the antelopes, hyenas, and all the larger animals that live within a certain distance each side of the Equator, carry in their blood organisms known as trypanosomes, which appear to do them no harm whatever. Mr. Buxton said that smaller creatures

harbour this microbe too. This is not quite correct. The small mammals, such as rats and mice, the lizards and birds, have similar organisms in their blood, but these are totally distinct from those which live in the larger wild game of Africa. I have already remarked that the trypanosomes of the antelope are quite harmless to them, and the reason is that they and their ancestors have probably been infected with these trypanosomes for many centuries. They are infected when quite young, and gradually a breed has been produced which is able to harbour these trypanosomes without suffering in any way from their presence. Directly you introduce this organism into cattle, horses, mules or camels, which have not been previously exposed to this infection, they immediately become ill and very often die. This was well known in the early days of African exploration. Livingstone found that when moving into areas where the tsetse fly lived his animals were attacked and died. Curiously enough, although the flies attacked human beings at the same time, they did not get this disease, which was limited to the cattle and transport animals. The question was taken up later by Sir David Bruce and other workers in Africa, and they were able to show that this disease, known as nagana, was due to a trypanosome, and that it had originated in the first place from the wild game. It became evident, therefore, that wherever these flies occurred in Africa it was impossible for human beings to settle down there with transport animals and cattle. Of course, it has been said you can use motor transport for development of the country, but I think it is probably true that you cannot have a country prosperous unless men can keep their cattle and horses. You cannot get milk from a motor-car or beef from a traction engine, and unless you have these two commodities a human community cannot prosper. Now it has been found that practically all over Central Africa, not only in Zululand, where Sir David Bruce first worked, but in Rhodesia, Nyasaland and Uganda, and away to the West Coast, many species of wild animals, especially in those areas where this fly lives, are carrying these microbes, and seven or eight other similar ones, all of which are doing them no harm, but which when inoculated into transport animals and cattle lead to their death in a very short time. As regards human beings, there is a disease in Africa called sleeping sickness, which occurs in men, and, like the disease in the cattle, it is caused by a trypanosome and is spread by a tsetse fly. There is not the same evidence that this human trypanosome lives to the same extent in the antelope as in the case of the one producing disease in cattle. Apparently in the case of sleeping sickness human beings act more as reservoirs than animals. A probable explanation of this is that many centuries ago a few susceptible human beings were inoculated with trypanosomes from the antelope by the tsetse fly, and, once having found a footing in the human body, it spread about from one human being to another, the black man himself acting as a reservoir rather than the antelope. But you can accept it as a fact that in many areas of Central Africa the larger wild animals—not the small animals, it is very important to

remember this—are harbouring this microbe in their blood and are thus a constant source of danger to human beings, because they prevent the development of the country and lead to illness and death. This being the case, it has naturally occurred to those who have investigated the subject to consider the advisability of exterminating these animals throughout Central Africa. There are two ways of eliminating the danger—the extermination of the big game or the extermination of the flies. The fly is known to occur in special areas, which are called fly-belts. It does not occur everywhere, but there are large tracts of country where the fly lives in enormous numbers, and in these areas there are also great numbers of infected antelopes. Fifty per cent. of the animals in certain districts have been estimated to harbour the trypanosome, and on this account it is impossible to develop the country. In other parts the fly is not so numerous, and the antelopes are not so heavily infected. Accordingly, something can be done by avoiding the specially dangerous fly-belts. A great deal of work has been done on the breeding and other habits of the fly. A great deal more remains to be done, and it is clear that if a means of exterminating the fly could be discovered, it would be quite safe to leave the antelope alone; but we do not yet know enough about the fly, and I doubt if we ever shall, to make it possible for us to bring about its artificial extermination. If that is so, it seems to me, that, if it is necessary to immediately colonise Africa, and if it is necessary for Africa to be rapidly populated and developed, there is no alternative to the destruction of the game in these regions. Sir David Bruce, in one of his original reports, said that it would be just as foolish to allow mad dogs to wander about among human beings as to allow these wild animals to remain. And, as a matter of fact, that is the logical position, but the question is, if we decide to do so, how can the animals be exterminated? I suppose one would have to organise an enormous number of hunters and instruct them to kill every animal they came across. This would be dangerous to the hunters themselves, as they would be liable to infection, and what is more, supposing they succeeded, they would not be able to remain there and, no other population being immediately available, in a year or two one would find the animals all back again. What seems more probable is that if one attempted to exterminate the animals over a large area only a small percentage would be killed, and the work would not be completed. It seems to me that ultimately—I do not know whether it would be a matter of a hundred years or a thousand years—Africa will be a populated land, and then it will be found that most of these creatures will have disappeared. They may be preserved to a certain extent, but they will not be seen in their natural surroundings, as at present. We know that the animals have disappeared from the South and North, and are now in Central Africa, and, as civilisation spreads, they will gradually disappear from this area too. The most reasonable attitude would be to allow a certain amount of extermination in the immediate vicinities of the large centres, and as each centre extends the animals will be driven back, and will

eventually disappear. That appears to me to be a more natural course, and better than attempting some great onslaught which could not be properly carried out and which would not be permanent. Mr. Buxton has advocated the preservation of these wild animals. I was very glad to hear that he deprecated the mere shooting of the animals for the sake of private collections, and for the sake of adding a certain amount of kudos to one's sporting history. I myself, as probably many of you have, have indulged to a certain extent in big game shooting. I do not know why one does it. I suppose it is an instinct for the chase, which we have inherited from our more lowly ancestors, which leads us to kill these beautiful creatures. I have felt it myself, and many others to whom I have spoken have admitted it also, that there is a feeling of regret when one sees one of these wonderful animals taking its last breath. All real sportsmen admit that it is the study of the wild animals in nature rather than the actual killing of them which proves so fascinating. Any one who has seen these wild creatures in Africa will never forget them. There is no more wonderful sight than to watch a herd of antelopes trailing across the plain, a group of hippos wallowing in a pool or a herd of elephants crossing the stream. A still more beautiful sight, which I once saw, is that of a herd of long-necked spotted giraffes, with their little ones by their side, feeding at the border of some wood. Without these creatures, Africa would be a very different place from what it is. I would be very sorry to see them go, though I admit this is eventually inevitable. I do not think that wholesale destruction is advisable, but a certain limited extermination, spreading from the centres, is perhaps necessary.

Mr. Buxton : May I ask, whether in your judgment the human reservoir is not uncommon? You speak of the native races who have been for incalculable generations exposed to this fly, and you say that they might be all bitten, but there might be only a few cases of sleeping sickness.

Dr. Wenyon : That is a difficult and complicated question. It seems probable that, originally, the trypanosomes which cause disease in cattle were inoculated into man accidentally. As a matter of fact those which live in the antelope and in cattle are, with great difficulty, inoculated into human beings on account of a great difference in the blood. The trypanosome which occurs in men in Rhodesia is different from the one in Uganda and the West Coast. The former is called the Rhodesian trypanosome, and the latter the Gambian. The Gambian trypanosome was probably inoculated to man from antelopes many centuries ago, and has become so adapted to man that it is with comparative ease passed from man to man by the fly, and no longer infects antelopes to any extent. In this case man is the chief reservoir. In the case of the Rhodesian trypanosome it seems to have only recently been inoculated to man. On this account it still resembles very closely the trypanosome as found in the antelope. Some maintain that it is identical with it, and others think it different. The German workers claimed to have proved that it was different as a result of inoculating

over one hundred human beings with the trypanosome from cattle or horses. Not one of the men became infected. Hence they conclude that the animal trypanosome is different from the human one. The experiment does not prove that the animal trypanosome can never be inoculated to man, but we do know that it is very easily inoculated to horses and cattle. Having once obtained a footing in man, as it now seems to have done in Rhodesia and other neighbouring colonies, it will be increasingly easy for it to be carried from man to man by the tsetse fly, as in the case of the Gambian trypanosome. And just as in Uganda and West Africa the black man is a reservoir for the Gambian trypanosome, a human reservoir for the Rhodesian trypanosome may also eventually arise if the matter is not dealt with. It is very easy for a tsetse fly to carry the trypanosome from one man to another, just as it is easy for the fly to carry it from the antelope to the horses and cattle, but it is not so easy for the fly to transmit the trypanosome from the antelope or cattle to man. In the case of the cattle trypanosomes the antelope is the chief reservoir, while in the case of the human trypanosomes the native is the principal reservoir. In Nigeria, Dr. Macfie has recently studied the disease among natives, especially children. They have apparently been infected for some years, as far as he could make out. Yet they were perfectly healthy, and he only discovered the trypanosome by examining the blood of a large number of people.

Mr. Buxton : Then you will admit, will you not, that it follows that there may be human reservoirs who are capable of infecting the fly ?

Dr. Wenyon : Certainly.

Mr. Buxton : You do not suggest that all the people should be killed off also ?

Dr. Wenyon : No, but you can remove the human beings to places where there are no tsetse flies, but it would be very difficult to catch the antelopes and remove them.

Mr. E. W. Bovill said : There is one point I should like to raise with regard to game preservation in the Sudan, and I use that term in its fullest geographical sense as applied to the whole of that great strip of Africa extending from the Nile Valley to Senegal on the Atlantic Coast. As our knowledge becomes more precise and our scientific records more extensive, it becomes more and more evident that this is a region of increasing aridity; that is to say, the desert conditions of the Sahara are encroaching on the Sudan. This process of desiccation is so gradual that it is apt to escape observation. In fact, it was not noticed until comparatively recently. The French were the first to suspect this process to be active. Its effects are now clearly perceptible and have been widely felt, notably in Senegal and Nigeria, and I believe also in the Anglo-Egyptian Sudan. The shrinkage of rivers and lakes and the failure of wells are causing a very distinct but very gradual movement of tribes from the southern fringes of the Sahara into the more favoured regions of the Sudan. In this big strip of Africa, lying between the Sahara and the tropical forest belt, we find extensive grazing grounds,

and these support a very large head of game. In the same region there is found a very considerable human population, which is increasing under the peaceful conditions of European occupation. This increase in population is being further exaggerated by migration from the north, caused by desiccation. The result of this increase in a population which is mainly agricultural is that the cultivable area of the Sudan is being very much extended, and this extension requires the destruction of forests and open bush. In consequence, we find that there is a constant tendency for game to be crowded out, owing to its range being continually restricted. If the failure of water supply and the process of dessiccation is causing dislocation to the human population, we may be pretty sure that it is producing a similar effect, if not an identical one, on the fauna of the country. Unfortunately, the game in the Sudan, British as well as French, has not been very closely studied; we know extraordinarily little about the migration and movements of game in this area. But there is no doubt that if this process of desiccation goes on, a very adverse effect is going to be produced on the fauna of the country. The fauna will have two alternatives: either it must die out, or it must migrate elsewhere. As I pointed out, the increase of population is making it continually more difficult for game to migrate southward. There is a third possibility, that of the fauna adapting themselves to the changing conditions, but if we examine the fauna of the Sahara, we do not find very much hope there. A great deal of the Sahara was once comparatively fertile, and supported a considerable human, as well as animal, population. The remnants which survive are very small. For these reasons, then, I submit that the process of desiccation must produce a very disastrous effect on the distribution of game in Africa, unless steps are taken to provide well-watered and reasonably extensive reserves. I am convinced that this question of increasing aridity merits the close attention by everybody concerned in the formation of game reserves on the southern fringes of the Sahara.

Mr. Buxton: May I add just this? There was an international commission, that is to say, international in the sense that all European nations that held land in Africa, and they came to the conclusion with regard to elephants, more particularly, and rhinoceros, a conclusion which, I think, a very good one and a very fair one, that all the nations should agree to a limit in the size of ivory, which could be allowed to be exported, and they put it at ten kilos., or a little over twenty pounds, as the smallest tusk that might be exported. Unfortunately, that was not very long before the war, and the Act was never ratified by all nations, at any rate, and it has never been carried out. But if you put a limit on tusks to be exported at some figure of that sort, the great majority of the cow elephants would not be killed, and so the race would be reproduced more rapidly. That was a very valuable course, with due regard to the interests of the natives, who, it was recommended by this commission, should have full protection. But for all that the small ivory should not be exported, because it generally

includes the cows. That should be borne in mind in public opinion as a thing to be pressed for even now. It is easier now, perhaps, to get an agreement on the subject of exports, than it was then.

Miss Werner : I would like to ask a question about elephants. I know that many plans have been made for taming African elephants, which plans always seem to have fallen through. I have been told that in some remote districts of the Kasai region, elephants are so tame that the children of the villages drive them away from the gardens with sticks.

They were districts where the natives had never been in the habit of hunting elephants; and I am wondering, if it is possible in such places, whether the hunting of them by Europeans should not be forbidden, and whether in time this might not lead to the possibility of taming these elephants and making them useful, as they are in India.

Sir Alfred Sharpe : With regard as to what the last speaker has said, elephants do not go near the villages because they want to make friends with the people, but to destroy the plots. I am afraid that if you treated them kindly and did not shoot them, you would have no crops left at all. With regard to the first speaker, I do not quite clearly understand him. He spoke of the tsetse fly generally, and he did not differentiate between the *palpalis* and the *morsitans*. What I have always understood is that not only what he describes as big game, but almost every species of animal and also some of the insects, also carry the cattle sickness trypanosome in their blood. If that is the case, every living thing would have to be destroyed, even the cattle, before you could say you have got rid of the trypanosome, and you would have to kill or remove all the human population. So many people advocate the killing of game in order that you may do away with cattle sickness, but it seems to me to be an impossibility, and in many cases in our colonies I am afraid the agitation really has its roots in the desire of the settlers to be able to shoot without licences. One other point, the *palpalis* is more easy to deal with, as it occurs in the undergrowth near water, but the *morsitans*, which carry the cattle sickness, are more difficult, as they spread all over the country and very often leave the shade to go some miles out on the plains.

Dr. Wenyon : I intended to make it clear that the trypanosome which infects cattle and man in Africa is not found in small mammals, birds or lizards, and certainly not in insects generally. Some of these animals have similar organisms in their blood, but these are quite distinct and unable to produce disease in man or domestic animals.

Sir Alfred Sharpe : My own experience has been, that you may find game in country where there is no tsetse, and you may find the tsetse where there is practically no game at all. It seems to me that the tsetse does not depend upon game for its existence.

Mr. Buxton : I think you will admit that big animals which have been infected with the disease and are yet immune where there are human beings, would be a source of infection. Infection would be

carried on by immune persons or animals who have been infected with the *morsitans* or *papilas*, whichever it might be.

Dr. Wenyon : That is quite true; the tsetse fly, of course, does not depend on the antelope altogether, but that does not affect the question. So long as the tsetse fly is there at all, it is the game or infected men who are dangerous. If the human beings or antelopes are infected, the flies become infected. If the wild animals were removed, the flies, though they might feed on other animals, would not become infected.

At the conclusion of his lecture, and the discussion which followed, Mr. Buxton was asked to describe some of his experiences in North and East Africa and the Sudan. He said: "I will make to you a confession. On one occasion I myself broke the game laws of the Sudan, for which there was little excuse. I think I had myself suggested to the authorities that wild ostriches, which are scarce to the west of the Nile in Kordofan, should be put on the list of the animals totally prohibited to be killed in that area. One hot midday everybody in our small camp was enjoying a siesta and dead stillness prevailed. Nothing was visible but two or three low green tents. I was asleep in one of them. An Arab approached me, crawling, and touched my foot and whispered something. I sat up on the foot of my couch and, looking out, saw a black male ostrich gazing at our little green pyramids. Before I recalled the regulation I had stretched out my arm and seized my rifle and laid the bird low. The camp was alive in a moment, for we were short of meat at the time, and there was rejoicing; but not for me when I remembered the prohibition. I sent the skin and feathers to the responsible authorities, and was very properly fined five pounds.

"My daughter and I were bicycling from Voi on the Railway to Taveta at the foot of Kilimanjaro in British East Africa. The track crosses the Serengate plain. We were some miles ahead of the safari and I had no gun. The solid rubber tyres travelled noiselessly over the rough track. Through the bushes I saw the dim outline of a large animal approaching. A full-grown lion came into the track about thirty yards in front of us, and exposed his whole length as he stood gazing over the plain. The remarkable thing was that the beast was completely unconscious of our presence. We both jumped off our machines and the lion sprang into the bushes. We passed the spot in some trepidation and put on all speed on a downward slope. On other occasions when I have encountered lions it has always been the creature who has spotted me first.

"A few days later I had a more disconcerting surprise. I fell into a concealed game-pit, fortunately only shoulder deep, before my askari seized my hand and pulled me out. The next moment I got one leg through the roof of another. At the bottom of them there were sharpened stakes firmly fixed in an upright position to disable any animal which might be trapped. Further examination showed that there were a whole series of these pits parallel to one another and all artfully concealed. Great labour must have been devoted to this series.

"In the bed of the River Athi we more or less surrounded four lions which we had seen to enter the reeds from the open plain. At least they thought so, and were rather cross and noisy. One had tried to get back, but was turned. One charged out in my direction and I got a fair chance at his shoulder. He turned back into the reed-bed, but presently the same lion, *as I then thought*, charged out again and paused in front of me, demonstrating loudly. Believing him to be the wounded animal, this time I took very deliberate aim at his eye, and he fell back into the reeds stone dead. When I went down, to my surprise I found *two* very large male lions lying dead within twenty yards.

"When sailing up the White Nile in the Sud area our native boat was moored for the night close to a mud-bank, and I experienced a different kind of attack. An enormous host of 'driver' ants invaded our ship, using the papyrus stems as scaling-ladders. I was sleeping on the roof of the cabin. I was awakened by shouts with a note of alarm or pain. My companion, sleeping below, had reached out an arm for a drink of water. In a moment it was covered by these ants, all intent on closing their mandibles in his flesh. He sprang out and almost immediately he was covered to the top of his head by the enemy, and they could only be displaced by successive buckets of water when he retreated to my safer position on the upper deck. When daylight came we found two columns of the insects—one of fresh arrivals, the other of ants retreating with their booty. The invasion lasted two days. We ultimately defeated the enemy with paraffin, some escaping along a rope to another boat. One good effect was that the other insect pests were completely cleared from the boat. Cockroaches of huge size in their terror came out in broad daylight into the open to avoid their enemies, but these and lizards and other vermin thenceforth were not. These ants frequently invade native villages, when the inhabitants clear out as a matter of course. When they are able to return they find that a thorough spring-cleaning has taken place. Lord Avebury wrote that 'the entry of the "drivers" into a house is immediately known by simultaneous movement of rats, mice and lizards.' I have not heard of any other case than my own of their invasion of a ship.

"This marsh country was inhabited in its drier parts by the 'Nuers.' Completely naked, their long lean bodies irresistibly suggest the storks and herons by which they are surrounded, particularly when they perch on one leg, while the other is drawn up under the body, the spare foot resting against the knee of the leg in use—a very characteristic attitude, not confined to this tribe. Some of the women, especially the younger ones, enhance their charms by a piece of straight brass wire inserted through the upper lip. This projects three or four inches and is jerked up and down by the tongue in a fascinating manner, but it would seem to make kissing difficult.

"It is a long spell from the marshes of Central Africa to the arid ranges which border the Sahara Desert on the north. These hills are inhabited by the Barbary wild sheep or 'Arui,' the most elusive animal, I should think, to be found in Africa. Though it lives in rocky ground,

to which, almost daily, herds of tame sheep or goats are driven, and it must be constantly within sight of their human caretakers, it relies on its invisibility and the identity of colour of its shaggy coat with the rocks, of which it invariably chooses the shady side. Among the most curious of physical phenomena which I have seen is the mountain of solid salt, about 1500 feet high, mentioned by Herodotus, and not far from Biskra. Owing to the solubility of the rock salt storm water during the centuries has carved its way and created a chaos of hollows on the surface sand below, and here and there one encounters clean-cut perpendicular shafts with walls of green semi-transparent salt rock, closely resembling the *moulins* on a glacier. One of the occasional sights from these heights is twenty or thirty dust columns, perhaps a hundred feet high—the product of local whirlwinds—slowly moving like giant ghosts across the immense expanse of the flat desert of Sahara.

“The native methods of capturing animals and fish probably date from very ancient times and are well worth noting. [Mr. Buxton showed a circular collar with spikes converging to the centre.] This fragile circle is placed over a hidden hole and supports a powerful snare made of sinews, to which a log is attached. This contrivance is used in many parts of Africa : so much so that it must be assumed that much four-footed game is taken. The poisoned arrow is another deadly weapon used by some tribes in East Africa. The bows are small and the arrows short. The poisoned tip, when not for immediate use, is covered with a strip of bark cloth for the protection of the individual. I have a bow and arrows, precisely similar to those I have seen in Somaliland. They were taken from a tomb of a very early Egyptian dynasty and probably date thousands of years B.C. Embedded in the skin of a rhinoceros which I shot I found an arrow-head which must have been fatal if it had penetrated to the blood-vessels. No animal can escape if the skin is penetrated. I have no doubt that the largest animals are successfully attacked with these small frail weapons.

“The spear takes many forms, and on the Upper Nile is largely used for taking fish. In this case they use a narrow spear-head which has reversed barbs, and the fish cannot readily shake itself free. I have seen Dinkas draw a long net parallel with the bank and, standing waist deep outside it, spear the fish as they come to the surface in the endeavour to escape. On one occasion I found Dinkas who had killed a fish which I judged to weigh quite 150 lbs. When water retires, leaving shallow khors, they use a long spear curved like a bow, and drive it before them with short underhand pushes. The curve is designed to carry the spear-head a few inches above the surface of the mud. I have seen good catches made in this way.

“The best hunt I have seen with a spear for the only lethal weapon, was viewed from a steamer on the upper Nile, but from a considerable distance. Natives in canoes were pursuing a hippopotamus in whose body they had succeeded in planting a spear. Attached to the head of it was a bladder so that they could follow the movements of the animal under water. With a glass we could see the hunted beast several times

come to the surface and threaten his pursuers with open mouth. Unfortunately our reis could brook no delay, and I am unable to certify the result, but I was afterwards told that these natives had overcome the pachyderm and had dragged the carcase ashore with ropes.

"A lady relative of mine who has farmed land in East Africa for ten years has large herds of sheep, which are necessarily enclosed at night in bomas, in which they are very closely packed. Notwithstanding this precaution they suffer from the occasional raids of lions and leopards. Her native servants, who are of the Lumbwa tribe, are brave and skilful in handling their short heavy spears. On hearing the turmoil they turn out and surround the boma. Once inside the invader is scared by the shouting and banging around him, and tries to hide himself among the flock. Some of the shepherds then enter the boma and running about on the backs of the sheep spear the intruder when they get a chance. In this way they killed seven leopards and two lions in six months.

"The late Mr. Theodore Roosevelt told me of an achievement, of which he himself was a spectator, by the same tribe. A lion, being started on the plain, was galloped to a standstill. When the spearmen arrived they surrounded the lion and the leader advanced and, kneeling on one knee, protected only by a native shield on his left arm, challenged the lion, who charged him, but before the beast could do more than maul the shoulder of the man, half a dozen spears had been driven through him, the work of a very few seconds. These spears have an iron blade two feet in length and a short shaft of the same metal. They are not thrown, but delivered with an overhead stroke."

The Chairman : I will ask you on my behalf (as representing the Society), as well as on yours, to pass a very cordial vote of thanks to Mr. Buxton for the address he has given us. We also very much appreciate the remarks of those gentlemen and ladies who have taken part in the discussion, which has been of the greatest interest to all of us.

The impression made on my mind is that Tropical Africa is a very dangerous place. Everybody there, whether humans or animals, apparently have some disease which they are likely to give to someone else, and the best way to retain one's health is not to travel there !

It interested me very much to hear the various views expressed with regard to the main question, which is, of course, still in dispute between scientists as to what extent big game does or does not act as a "reservoir." There is a difference of opinion with regard to this, and the problem of the protection of the big game is largely involved in the matter. Personally, I should be inclined, as Dr. Wenyon said, to give them the benefit of the doubt. I may say that the Fauna Society, with which Mr. Buxton is connected, has done good work by endeavouring to take a medium course. Mr. Buxton mentioned a case which I happen to know something about—the elephants at Addo Bush. When I was Governor-General I took some interest in this matter, and several of us tried to protect these elephants from

destruction. But it was obvious to us that you could not possibly argue that these elephants, which then numbered about 113, should be protected, because what it really meant was that they would be protected at the expense of, and greatly to the detriment of, the neighbouring farmers. It had become an impossible position.

It is a curious thing, I would note, that elephants in the Addo Bush are much less high than other elephants in S. Africa, and have smaller tusks. This characteristic must have been developed in hundreds or thousands of years. These elephants are less high so that they cannot be seen in the low bush, and they have smaller tusks, so that they can get through very thick bush. This is a curious incidence of the adaptability of animals.

There has been a great deal of undue extermination of big game in Zululand; but here, again, I am bound to say, it was a case where the increasing protected herds were doing considerable damage to crops, and it was also believed that they were spreading the "Fly." But like many other things, it was a right thing done in a wrong way, and resulted in more extermination than there was any justification for, and the destruction of most of the few remaining white rhinoceroses living in that district.

I do not know much about the scientific part of the question, but I think you will agree with me we are very much indebted to Mr. Buxton for having raised the question, and to the other speakers for interesting speeches in reference to it.

Mr. Buxton in his last reminiscences mentioned an adventure that he and his daughter had had at meeting a lion in their path.

He has not given quite the right story, as he was too modest. It was this—that in East Africa Mr. Buxton and his daughter were cycling along, when they saw, about one hundred yards ahead of them, a lioness and a lion lying in their path. They weren't a bit frightened, but rang their bells very violently. The lioness first got up, looked cross and slunk away. They rang their bells again, and the lion, alarmed, followed, and the two bicycle-riders pursued their course down the hill. But the real point of the story is that a version of it came to be reported in the newspapers here; and when Mr. Buxton came back, several bicycle-bell manufacturers wrote to him offering him considerable sums if they might advertise their bell as the bell which frightened away the lion. We wish, Sir, to thank you very much indeed for your Address.

Mr. Buxton : I would like to thank the Chairman for presiding. I will make a note of his version of the story, as it is a great improvement on mine.

EDITORIAL NOTES

CRITICISM from outside is never pleasant, but it would be **Native Education in Africa.** petty to resent criticism so courteously expressed and so admirable as that which Dr. T. Jesse Jones of the Phelps-Stokes Commission has made on systems of native education in force in various parts of British Africa. Dr. T. Jesse Jones, a British subject born in Wales, has become an eminent American sociologist and specialist in education, and is a Director for Research under the American Phelps-Stokes fund, which was established to promote the welfare of the negroes. He has been visiting the chief native centres of the West Coast of Africa, the Union of South Africa and the Congo, for the purpose of investigating native conditions, and especially the systems of native education, and has embodied the result of his researches in a letter to the Administrator of Southern and Northern Rhodesia. His opinions are very tactfully expressed, but really they amount to the conviction that in many parts of British Africa those responsible for the education of the natives are working on entirely wrong lines. "Teachers must realise," he says, "that their influence and responsibility extend, beyond the walls of the schoolroom, to the health, the work, the recreation and the general well-being of the community. This function of the school our Commission has found to be almost unknown in many parts of Africa." Dr. Jones lays down that the fundamental test of education should be its adaptation to the development of healthy human beings and sanitary community conditions. He found, however, that sanitation and hygiene were either made subordinate to subjects of less value or entirely neglected. Native education should be so designed as to meet the simple needs of men leading a simple village life. "Even casual observation of educational curricula," says Dr. Jesse

Jones, "shows a lamentable neglect of this fundamental need of the natives." Since the overwhelming majority of Africans must live on and by the soil, they should be taught the elements in the theory and practice of gardening and such handicrafts as are applicable to village life. Dr. Jones finds, however, that either no agricultural training is given, or such highly technical training as requires long apprenticeship. His observations led him to believe that many natives are undermining their health and morals through lack of properly directed recreation, and states that American experience in the Philippine Islands shows that it is easy to turn the primitive mind from excessive sexual indulgence and other harmful pleasures to recreations that improve the physique, morals and morale. He advocates that the largest possible use should be made of native music and dancing. He finds that schools, generally, are hidebound by the tradition that reading, writing and arithmetic form the basis on which all education should rest. He finds that in this branch of learning but little consideration has been taken of the natives' actual needs. "Arithmetical problems have dealt with London finance rather than the simple exchange of kraal and village." The result of Dr. Jesse Jones' investigations may be summarised by saying that he found the aim of native training institutions to be to impart information rather than to educate. He finds little or no attempt to develop character which, he lays down, means not only the teaching of honesty but the cultivation of those virtues in which the native peoples are known to be weak, such as perseverance, regularity, thoroughness, thrift, cleanliness and order.

Dr. Jones' criticism is a somewhat bitter but very wholesome pill. He sugars it very cleverly. Although he had not originally intended to visit Rhodesia, he altered his itinerary in order to examine the work of Mr. H. S. Keigwin on the native Reserve at Chindamora, Rhodesia, because of the reports he had received of Mr. Keigwin's work. He found that Mr. Keigwin's school was meeting practically every test which he outlined as essential, and cunningly interwove the harsh things he has to say on native education in British and other parts of Africa in a letter addressed to the Administrator of Rhodesia containing warm praise of Mr. Keigwin's work.

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ON the 20th May last, Dr. Marshall of Uganda described to the Society of Tropical Medicine and Hygiene a new treatment that he has discovered for sleeping-sickness. Although the treatment by antimony and atonyl has saved some lives, it cannot be regarded as very satisfactory, as there are scarcely any authentic records of cures by this means among natives, and very few among whites. The Trypanosomes injected by the tsetse-fly into the blood are the prime cause of the disease. Castellani found the Trypanosomes in the cerebro-spinal fluid of patients. Dr. Marshall's treatment is a development of this discovery. Since treatment has hitherto been given by means of the blood and such treatment has been only partially successful, killing the organisms for a time, but only for a time, it occurred to him that the cerebro-spinal fluid formed a reservoir from which disease organisms returned to the blood after they had been driven from it by methods formerly in use; that the cerebro-spinal fluid, in other words, formed a base from which the Trypanosomes could organise new attacks. The plan he adopted was to inject salvarsan ("606") into the patient's blood, and after a lapse of half an hour to withdraw a small quantity of blood and inject this, *i. e.* blood containing salvarsan, into the cerebro-spinal fluid. So far, fifty-six patients have been treated by this method. It was ineffectual in the case of two patients in whom the disease had reached an advanced stage; four of the patients have since died from other causes; the remaining fifty are alive and well. Dr. Marshall had the satisfaction of presenting one of his patients to his audience. He treated this patient on the way home from Egypt. At Cairo Trypanosomes were found in his blood. It is now entirely free of the germs. The patient is in robust health and contemplates returning to Uganda.

It is now suggested that the secret of Dr. Marshall's success is that the patient develops an antidote to the disease in his own blood, which does not, however, extend to the cerebro-spinal fluid, and that in injecting blood into the cerebro-spinal fluid, he conveyed an antidote to an area that it had not hitherto reached. If this be the case each patient carries the remedy for the disease in his own body, and the use of salvarsan becomes unnecessary.

The devotion of Mr. H. S. Wellcome to the fight against tropical disease needs no emphasising, but it has only recently become publicly known that a great and generous scheme that he had for the prosecution of physiological research was very nearly rendered abortive by a small section of the community. In 1919 Mr. Wellcome acquired Langley Court, Beckenham, for £30,000, intending to establish there a laboratory for physiological research. When the necessary license was applied for, objections were raised on the ground that the laboratory would prejudice the neighbourhood's residential charms and would be a "germ-factory," causing risk of infectious diseases. The licence was also imperilled, after thousands of pounds had been spent in constructing the laboratories, by the objection of the Urban Council to the erection of a water-tower, a sixty-foot chimney and other necessary extensions. The situation led to an appeal to the Ministry of Health, with the result that Mr. Wellcome's devoted work in the war against disease is to be allowed to go forward.

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THE Committee, presided over by Lord Buxton, to consider **Home Rule for Rhodesia.** the granting of responsible Government to Southern Rhodesia, published its first report on the 12th May, last. The Committee had to deal with two problems of special importance, the claims of the British South African Company and the status of the natives under responsible government. The Chartered Company had always acted in the belief that all unalienated lands in Southern Rhodesia were its property, until a Judicial Committee of the Privy Council in July 1918 decided that they belonged to the Crown. Lord Buxton's Committee, therefore, proposed the creation of a Land Board to decide questions as to the administration and disposal of Crown Lands. With regard to native affairs the Committee recommended that certain limitations or reservations should be made, if and when responsible government is granted, by which the natives should be secured in their existing position and ensured against discriminating disabilities or restrictions, and for this purpose proposed that the existing authority and control of the High

Commissioner under the Order in Council of 1898 should be substantially maintained.

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TWENTY years ago it would have been a bold man who **General Smuts on** predicted that General Smuts, then in **Cecil Rhodes.** arms against the British forces, would live to urge the rising generation to carry on the work that Cecil Rhodes had begun. At the annual dinner of the Rhodes' Scholarship Trust, held at Oxford on June 10th, last, General Smuts was one of the principal guests. He said that whereas a politician works from day to day, a statesman, such as Cecil Rhodes, worked with his eyes fixed on the future. There was a racial side to Cecil Rhodes' ideas that did not appeal to him. He had always felt, and had often said, that the mere bond of race, the British bond, the Anglo-Saxon bond, which was supposed to hold the British Empire together, did not appeal to him. He took the larger view that there were greater forces at work, deeper human forces within this Empire, and on that platform of great ideals, of great conceptions of human service, it was possible for us, whether Anglo-Saxons or Boers, or to whatever nationality of the Empire we happened to belong, to unite. Referring to Cecil Rhodes's hope that the Germanic peoples might be roped in to the great brotherhood of human service, General Smuts said that in the early nineties the world was full of optimism. They did not see the great shadow of war looming ahead, and it seemed that science was going to improve and better the human race. What had become of that dream? Science had become an instrument of destruction, and no wonder there was pessimism to-day. It was for the young men in that and other universities to rebuild the hopes that were shattered. In their hearts must be born the greater spirit that was to establish the new world. They were all missionaries in a great cause, and Rhodes had pledged them to carry out his great ideas. It was for them to realise the vision which Rhodes had conceived.

* * * * *

HITHERTO, fanaticism has not seemed consistent with the **The Billhook** Bantu temperament, unless one can regard **Tragedy.** as fanatical the extraordinary loyalty shown

to Chaka and other Bantu despots. The recent tragedy at Billhoek, however, can be assigned to no other cause. Some months ago a number of natives, calling themselves Israelites, banded themselves together under a man who claimed to be the prophet Enoch, to await the return of Christ to earth. They committed no violence, theft, or breach of the common law, but defied by-laws regulating the building of huts. Their numbers grew, and their open disregard of by-laws persisted, in spite of all remonstrance both from the police and the Secretary for Native Affairs. This open defiance could not be overlooked, especially in view of the fact that the Israelites were drilling and making obvious preparations to resist authority. They frankly expressed defiance of the Government and all white men. They were, they said, under the special laws of Jehovah and would take orders from none but Him, though it appears that they were so misguided as to expect help from the ex-Kaiser, of all people! No peaceful means of bringing the Israelites to reason appears to have been left untried. The situation became menacing and the Secretary for Native Affairs, accompanied by a police magistrate and a deputy sheriff, supported by a force of six squadrons of police, went to eject the Israelites from the ground of which they had taken possession. The police were ordered not to use force unless, and until, it was unavoidable. When called upon to surrender, the Israelites, clad in white and armed only with spears and knives, charged. Twenty-five police were ordered to fire one round. This was quite ineffectual. Again a round was fired, but the advance continued, even the wounded rising and struggling forward. Then five rounds were fired. This finished the affair, and the police were able to turn to the more congenial task of rendering first aid to the wounded. The first Press reports stated that machine-guns were used, but at the inquest this was proved not to be the case. The police, fortunately, escaped with few casualties, but the casualties among the fanatics were heavy—inevitably so, for they charged right up to the muzzles of the police rifles. The whole affair was characterised by the utmost restraint and patience on the part of the authorities and determination on the part of the fanatics, whose reckless courage, however

mistaken, cannot but be admired. It was a pitiable tragedy for which no blame seems to attach to anybody, for fanatics are subjects of pity rather than blame. It is reassuring that sane native opinion expressed in the native paper, *Imvo*, and by the General Council of the Transkeian Territory, recognises that the action on the part of the authorities was inevitable.

* * * * *

ANY one in search of an argument in support of a scheme **The Economic Value of Imperial devolution** might find it in **of Plumage Birds.** the Plumage Bill, which passed the House of Commons on June 10th. For years past members of both Houses of Parliament have endeavoured to prevent the wholesale destruction of wild birds cursed with the possession of marketable plumage, by making the importation of their feathers illegal. Year after year their efforts have been thwarted by the protagonists of those interested in the importation, sale and use of these feathers. It is unfortunate that supporters of legislation to protect plumage birds have based their arguments too largely on perfectly legitimate sentimental considerations, and have attached too little weight to the economic value of the birds they seek to protect. Sir Harry Johnston has pointed out that among African pests kept in check by plumage birds are the tsetse-fly, gad-fly, midge, sand-fly and, particularly, the tick. All these pests do more or less harm. The tick causes disease among domestic cattle, the tsetse-fly among both cattle and men; the gad-fly, the midge, and the sand-flies too, though less important, contribute their share towards making man miserable. The tick's sole enemies are birds. The egret preys on the water-snail that carries the schistosomes responsible for the tropical disease known as bilharziosis, and on an insect that causes immense havoc in the Egyptian cotton fields. The service that living plumage birds render to mankind is, therefore, literally, incalculable. The æsthetic value of the service they render when dead to those who wear their feathers as ornaments may be dismissed from the argument as trivial. The monetary value of the dead birds to those interested in the feather industry is easily calculable, is very

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small, and is, in fact, practically negligible when set beside the monetary loss incurred by the spread of pests in districts where plumage birds have been exterminated. Unhappily, those who in England are financially interested in the destruction of the plumage birds either have votes or can otherwise influence the decisions of Parliament. Those who are financially interested in the protection of plumage birds live in Africa, the West Indies or other countries not directly represented in Parliament. If the interests of the Empire as a whole were adequately represented at Westminster, plumage birds would have been protected from the moment of the first discovery of their economic value.

THE French Government has recently decided on the erection of a Mussulman Institute and Mosque in Paris. The Institute is to include a library containing the most treasured literary works of the Muhammadans and also the most notable of western literature. It is thought that the intercourse between the two peoples and the exchange of ideas, together with the freedom of worship, will cement the feeling of comradeship proved during the War by the French and Muhammadan blood shed side by side on the fields of France in a common cause. It is to be a mark of honour shown in recognition of the defence and victory of the Moroccan, Tunisian and Algerian troops on the Marne when, under General Gallieni, they were flung into the balance almost as soon as they landed in France. The inauguration of the Institute and the mosque will serve as a tie. In order to make the feeling of mutual homage more heart-whole, the task of building, organising, administering and caring for it, is to be left in the hands of Mussulmans. The *Société des Habous des Lieux-Saints de l'Islam* is to take charge of the Institute. The idea was first mooted in 1895, but at that time it seemed premature. It was thought to be a fitting moment to erect a suitable monument to Muhammadan loyalty and devotion. The French Parliament has voted 500,000 francs to the scheme, and although it will take many millions of francs to complete it, it is being eagerly supported by Muhammadans all the world over.

OBITUARY NOTICE

THE cause of enlightened and sympathetic government in Tropical Africa, and of the scientific investigation of its problems and resources, has lost a devoted worker in Mr. R. E. Dennett, who passed away in a London nursing home at the end of May, after an illness of several months' duration.

Mr. Dennett, a Devonian by descent but born in Valparaíso, son of an Anglican clergyman of marked originality and force of character, was himself intended, by his father, for the Church, but his own inclinations lay in a different direction, and early in his twenties he began what was to prove an exceptional career in that, the Last, Continent which has claimed the life work of so many British men and women to whom the hardships of tropical life appeal irresistibly. He went out trading in the service of a fine old Liverpool house, Messrs. Hatton & Cookson; and his first few years were spent in the territories now forming the French and Belgian Congo. He also carried on business in Portuguese West Africa. From the first he was student as well as business man, and while in the one capacity he gave much time to acquiring first-hand knowledge of the people's languages, religion and political institutions, in the other he more than once made spirited and not always unsuccessful attempts to assert the rights of independent trade. He figured in more than one diplomatic "incident" of those earlier and more stirring days; and the Foreign Office knew his name well. He met Marchand almost at the beginning of that journey which at Fashoda had an end dramatic at the time and ultimately satisfactory to two great colonising Powers. He was one of the first to point out to the British people and Government the sinister possibilities of the concessionaire system, which the justice-loving Belgian nation remedied when its true nature and effects were made clear to our neighbours by a national movement of which no British person has any cause to feel ashamed.

Nearly a couple of decades ago Mr. Dennett exchanged business for official life. He entered the Public Service of Nigeria, being at first nominated as Commercial Intelligence officer but posted to the Forestry Department, as Conservator in what was then Southern Nigeria. He retired several years ago and thereafter lived in London, where he was always fearlessly and self-effacingly to the fore whenever he conceived his intervention could serve the cause of true progress in the land where he had lived for so long. Early in his Coast life he came under the spell of Mary Kingsley, and if that remark-

able woman did not wholly re-shape his life, she at all events deepened and strengthened in him, as in so many other Englishmen, the resolve to leave unused no effort to the good end that Britain might understand Africa. His literary output was considerable. *At the Back of the Black Man's Mind*, that contribution to it by which perhaps he will be longest remembered, has deservedly won a high place in the literature of racial study and interpretation.

A. C.

I LANDED at Cabinda one day in 1882, from a kindly gun-boat which was giving me a passage down the West and South-west coast of Africa.

I was travelling to Portuguese Angola with the Earl of Mayo to explore the lands on the verge of South-west Africa, and was already greatly interested in the Bantu Languages. The principal agent of Messrs. Hatton and Cookson introduced his assistant, Mr. R. E. Dennett, as likewise engaged in that particular study, and as having already put together some remarkable vocabularies of the Loango dialects (those which are numbered 101 and 102 in my Comparative Study).

In those days so little was being done in Bantu research that the announcement astonished me; but I was not mistaken. I could not then—or since—agree with Mr. Dennett in all the conclusions he drew from his linguistic and ethnological studies, but I was certainly struck by his intelligent appreciation of the Bantu family and his “advanced” views—as they were then held to be—on the policy of the European towards the African.

Some years later, Miss Mary Kingsley met him in the same localities near the mouth of the Congo River. She not only learnt a good deal from his investigations but she so strongly represented his worth as an understander of the West African Negro that she obtained—or led the way to obtaining—an appointment for him in our Colonial West African Service. Mr. Dennett afterwards spent a good many years in the Lagos and Benin countries.

Personally I was much more impressed with his studies of Benin speech and his ethnological work in Southern Nigeria than I had been with his books on the Bantu languages. Although he had a considerable knowledge of the Congo tongues I have cited, I thought the deductions he drew from these studies were not supported by other evidence; whereas I venture to consider his Benin researches very remarkable and well founded. I am not aware whether all his Benin work was published. So far as I could judge from his MSS., it well deserved publication and consideration.

H. H. JOHNSTON,

BOOKS REVIEWED

A Manual of Lu-ganda. By (the Rev.) W. A. Crabtree.
Cambridge University Press. 1921. 12s. 6d.

As long ago as the spring of 1901 I met the author of this book on the confines of the Elgon country where the remarkable Masaba tongues are spoken. Even then he was hard at work studying the Luganda language which was the "civilised" tongue, the French of the Uganda Protectorate. After nearly twenty years a section of his important Bantu studies is printed in the form of this grammar of the Luganda language. He has done much in the interval, through the medium of this JOURNAL, to enlighten us on the possible affinities of the Northern Bantu.

Luganda, the speech of the Baganda, is perhaps the most interesting of the Bantu languages, though occasionally there is a wavering on my part towards either the Olu-konjo of Ruwenzori, or the Masaba tongues of Elgon. The first-named (Konjo) still retains the tenth prefix (Zi-) in a very elaborated form, and the other sub-group which rivals Luganda in ancientry of form—the Masaba dialects of western Elgon—exhibit the pre-prefixes in their fullest forms. But Luganda on the whole may be taken to be the most archaic of the spoken Bantu languages. In addition, it is extremely and nicely expressive, comparatively easy, and harmonious to pronounce; and easier in its grammar than either Konjo (No. 1 in my list) or the Elgon sub-group. Both these rivals are spoken nowadays by only a few thousand people; whereas Luganda is the speech of Buganda, and in many ways the dominant language of the whole Uganda Protectorate—in other words, of about one and a half million people.

Luganda possesses virtually the whole of the nineteen concord-prefixes (though No. 10 is very seldom used in the Zi-form), even showing at times examples of my No. 8a, or the plural Bi- used in a singular or collective sense. Mr. Crabtree does not waste much time or space over these rare examples of nearly-forgotten prefixes, but really teaches his readers how to speak (and understand) the language. Yet his is a work likely to be equally useful and interesting to the philologist

and to the person who merely desires to acquire this beautiful language for practical purposes. It must not be forgotten, however, by the philologist that Luganda is the Sanskrit of the Bantu or what we used to consider Sanskrit to be towards the Aryan languages. From this post, however, later research has somewhat deposed Sanskrit in favour of spoken or no longer spoken Aryan tongues farther to the north and west. But all Bantu research continues to enhance the importance of Luganda as a key to the Bantu enigma. H. H. J.

Among the Ibo's of Nigeria. By G. T. Basden, M.A., F.R.G.S.
With 37 illustrations and a map. (London: Seeley, Service & Co.)

MR. BASDEN'S account of the Ibo tribe is worthy of a much fuller and more detailed notice than we can give it here. Every first-hand description of facts is valuable, even if we cannot hope for impeccable accuracy in details; and the writer's candid confession that "I feel, after nineteen years, more puzzled over many things than I did after the same number of weeks in the country," induces a high degree of confidence in the accuracy of his observations. At the same time one wonders whether he is not slightly overstating the case, when by way of explaining the difficulty experienced in fathoming native ways of thinking, he says: ". . . The black man does not himself know his own mind. He does the most extraordinary things and cannot explain why he does them. He is not controlled by logic; he is the victim of circumstance, and his policy is very largely one of drift." The remarks which follow, on the subjection of individual to tribal consciousness are interesting, though one does not feel sure that the facts adduced support Mr. Basden's contention. However, the subject is a somewhat abstruse one to discuss within these limits.

The main features in the life of Ibo men and women, from birth to death, are described in a series of very readable chapters. Those dealing with religion, secret societies and witchcraft, etc. (XX-XXIII), are especially interesting: we may instance more particularly the Awka (Oka) oracle and its connection with the guild of itinerant blacksmiths. (I am not aware how far the smith's craft in Africa has been studied in detail; probably there is at least one German monograph on the subject.) The "orders" described in Chap. XXIV appear to be similar to the "classes" or "degrees" of Hamitic and Bantu tribes in East Africa, and the tabus to be observed by chiefs, mentioned on p. 263, are noteworthy. We can

thoroughly recommend this book to students of "Africana"; and if some points in it are liable to be challenged by other experts and provoke discussion, this is all to the good in the ultimate cause of truth.

A. W.

A Grammatical Guide and numerous Idioms and Phrases for Beginners in the Ewe Dialect. By Professor D. Westermann, translated from the German by C. D. Trotter, District Commissioner, Gold Coast Colony. (London: Harrison & Sons.)

PROFESSOR WESTERMANN'S admirable Ewe Dictionary and Grammar were noticed in our pages some fifteen years ago. The present work is an English version of a smaller work of his, produced in a form which enables it to be easily carried in the pocket, and containing a clear and compendious outline of the grammar and an excellent assortment of useful phrases. Ewe is the principal language spoken in Togo; it is also spoken in Dahome and in some western districts of the Gold Coast Colony. Apart from its practical utility, the study of Ewe is important as a guide to the structure of the neighbouring languages: Twi, Gã, Yoruba, etc., whose relationships are pointed out by Professor Westermann, in the larger works already mentioned.

A. W.

Grammar of Afrikaans. By M. C. Botha, M.A., Acting Professor of Afrikaans, University of Cape Town, and J. F. Burger, M.A., Lecturer in Education, University of Cape Town. (Cape Town: T. Maskew Millar.)

"AFRIKAANS," or "the Taal," long depreciated as a mere jargon, is at last having its rights as a distinct language recognised. It is a very interesting development to which we cannot, at the moment, recall any exact parallel. The American variety of English has not differentiated itself to the degree of shedding all its inflections and requiring a distinct grammar of its own; and the "Creole" dialects of French and Portuguese have scarcely attained to literary recognition. The curious will find points of interest in comparing Messrs. Botha and Burger's grammar with the publications of the Taalbond issued about forty years ago, and noting changes either in the language itself or in the treatment adopted. The little book is clear and well-arranged; the only fault we have to find is that the exercises—at any rate in the early part—require the memorising of too many words. The authors, one is glad to see, have sound views on phonetics: as to the

origin and formation of the idiom, they appear to differ to some extent from other authorities, e. g. Professor Hesselning.
A. W.

Afrikaanse Idioms, Spreekwoorde en Segswyse. Deur P. T. Hoogenhout en J. J. A. Schoeman. (Cape Town: T. Maskew Miller.)

A COLLECTION of Afrikander proverbs, idioms, etc., which will be found very interesting by those who understand the language. It does not cover quite the same ground as Mansvelt's *Proeve van een Kaapsch-Hollandsch Idioticon* (1884), and is without the etymological notes and the stray fragments of folk-lore which make the latter so attractive. A few entries are the same in both books; that the number is not larger is probably owing to the difference in their scope, Mansvelt's being intended to explain African linguistic peculiarities for the benefit of readers in Holland—also possibly to the fact that some of the expressions he records have become obsolete. One striking point is the number of idioms (not used in Holland) which seem to be literal translations from the German. This is also noticed by Mansvelt; it is probably due to the number of German soldiers who enlisted in the service of the Dutch East Indian Company and ultimately settled in South Africa. This little book will be found a useful companion to the Grammar of Messrs. Botha and Burger.
A. W.

The Backbone of Africa. By Sir Alfred Sharpe, K.C.M.G. (London: H. F. & G. Witherby, 326 High Holborn, W.C., 1921; pp. 224, index, photographs and maps. 16s. net.)

SIR ALFRED SHARPE needs no introduction to readers of this *Journal*. Many will remember and appreciate his work as Governor of Nyasaland during the years following 1896. The present book, described by him as "a record of travel during the great war," tells of three journeys made in 1912-16 which covered practically the whole of the suggested Cape to Cairo Route, and the countries visited were Portuguese East Africa, Nyasaland, German East Africa, British East Africa, Uganda, the Belgian Congo, the Anglo-Egyptian Sudan and Egypt. The region that made the strongest appeal to the author was that of Lake Kivu, with its picturesque highlands, charming climate, and mighty volcanoes. His description of the great volcanic eruption he was fortunate to witness in that region is the most fascinating part of the book.

Ethnologists will find very little material in this volume. Beyond such sentences as: "My carriers from Arebi were a queer, wild lot," "This is the country of the Asenga, a people we found to be deceitful, dirty and unattractive," Sir Alfred tells us little about the people he met. He is more interested in the economic development of the countries—railway projects, the tsetse fly, soils and crops, gold and copper fields, and we are grateful for all the information he gives on these matters. The final chapter, on "Reconstruction in Eastern Africa," contains his personal views which deserve, and will receive, all the attention due to the opinions of a man of such experience. He assumes that the German colonies will in no circumstances ever be given up again. He advocates the amalgamation into one "Colony of British East Africa" of all the Protectorates between the Zambesi and the Anglo-Egyptian Sudan. There would be three local administrations under governors responsible to one Governor-General, viz. (1) Nyasaland and Northern Rhodesia, (2) Uganda and Kenya, (3) the Zanzibar group of islands and Tanganyika. Sir Alfred would rectify the boundaries of the present territories, enlarging Nyasaland and Kenya at the expense of Tanganyika. "We have," he says, "in these tropical possessions some of the richest countries in the world," and he sees that their development can only be secured by the extension of railways. He indicates the new lines which require to be built and hopes that whatever economies may be necessary in these days the African colonies will not be stinted in the essential means of developing their immense resources. This united East Africa Colony, says Sir Alfred, should have one customs tariff, one policy, one administrative system; it should have also, in conjunction with the West African colonies, some more direct and effective form of representation in the Home Country, either by the creation of an African Council or of a special expert Board, with headquarters in London. Sir Alfred advocates, moreover, an independently elected legislative Assembly for the proposed Colony—a body invested with effective powers. One of the first things to be considered by the African Council would be the important question of dealing with the spare lands in these territories. Our author speaks in favour of a permanent reserve of native troops. In regard to the labour necessary for developing these countries, Sir Alfred decisively puts aside any system of compulsory labour, even in a disguised form, and sees the solution of the problem in the creation of new incentives to work. Sir Alfred regards the work of Christian Missions solely from the point of view of the extent to which they have aided, or may aid, the native to share in the industrial and

commercial development of Africa. He naturally, therefore, commends the great industrial work accomplished by them: "With so long an experience of Eastern Africa, perhaps I have had exceptional opportunities of observing the natives of Nyasaland and North-East Rhodesia who have been under the influence of industrial, combined with purely religious, instruction; and I can vouch for the remarkably satisfactory results." Comparing the Moslem propaganda, Sir Alfred sees that "the cult of Christianity is severely handicapped in Africa and all the more credit is due to our missionaries for the undoubted success of their labours."

In regard to tsetse, Sir Alfred believes (and prints a report by Major Cuthbert Christy in support of his belief) that it is not dependent upon big game, and he protests against any attempt at killing off the big game with the idea of thereby exterminating the fly. In view of present developments, he sees no need "except for diplomatic or sentimental reasons" for a through railway from Cape to Cairo.

We have, perhaps, said enough about this informative book to induce our readers to study it for themselves. We have read it with the deepest interest and have the greatest pleasure in commending it to members of our Society.

E. W. S.

Journal of the Royal Anthropological Institute. July to December, 1920. Vol. 50.

MR. G. W. MURRAY contributes a comparative essay on the Nilotic languages, in which he sets forth in a series of parallels, both in grammar and vocabulary, details to prove the common ancestry of three of the groups of languages compared, *i. e.* Nubian, Bari and Masai, and to establish the strong probability between these three and a fourth—Shilluk, with which he includes Dinka. Mr. Meredith Sanderson has contributed an article on Relationship Among the Wayao. The Wayao are exogamous but not totemic, though opinion differs as to how recent is their loss of totemism. Succession is through the female line, and the Wayao attribute their defeat by the British in 1893 to the fact that the reigning chief, Salimu, belonged to the male line.

Mr. N. W. Thomas contributes a long and interesting article on Edo Burial Customs. Mr. Neville Jones describes with diagrams and illustrations the Implement-Bearing Deposits of Taungs and Tiger Kloof. He divides the stone implements found into six classes, and ascribes each to what he regards as the corresponding European period.

CORRESPONDENCE

To the Editor of the JOURNAL OF THE AFRICAN SOCIETY.

DEAR SIR,

In the last JOURNAL, Sir Harry Johnston calls our attention to that most interesting problem, the Semi-Bantu languages in West Africa. May I add a few notes?

Two years ago I wrote (*Sudan Notes*, April, 1919, p. 150): "At some date a negro tribe impinged upon the northern fringe of the Bantu area and caused a great upheaval whose effects were felt as far south as the Fang, westwards certainly as far as Ibo and Nupé, and perhaps even up to the Temne of Sierra Leone; eastwards the movement spread to the Shilluk group, etc." I should now revise this last sentence. The centre of the movement was the Madi-Logo area. Eastwards there were other movements both of Nandi Hill-men and Libyan Masai¹; and these independent movements caused the Logo-Madi migration to send all its energy westwards.

The features of this irruption were twofold: (i) A curious tendency to resort to monosyllables. (ii) A development of the Bantu system of short and long vowel into distinct intonation. Subsidiary to this main motif was, no doubt, the necessity for some means to rectify the awful hash of Bantu bilaterals shorn of prefix and ignorant of final consonant.

In a tentative way I have tried to compare the tones of a dozen or so words in Ibo with the corresponding words in Lu-Ganda. There are plenty of words in the brief compass of Spencer's *Ibo Grammar* which are clearly Bantu, having a vowel substituted for the Class Prefix. The rise and fall of tone, as marked, answers pretty closely with the short and long vowel of Ganda.² Here is just a sample: *olu-g'iro*, a story becomes *iró*; but *eri-gyá* (*li-yá*), envy, gives *iró*. The reason for change of tone is therefore evident. So, too, *nínú*, salt (Bantu *munyu*—with an equal light stress—almost middle tone—on each vowel) is distinguished from

¹ Masai is almost certainly Imoshagh (*il-moshagh*)—the free men—as the Libyans call themselves; the Macaiu of the Egyptians (Libyan mercenaries acting as soldiers and police). Tamáshegh, the feminine form signifying their language, gives the strong accent on the "a" as in *il-Másai*.

² "This raising and lowering of the tone (in Bobangi) is similar to the use in English of long and short vowels."—Whitehead, *Bobangi Grammar*, p. 3.

nñu, 400, a word obviously containing the Bantu element *-nne*, four; the final *u* is perhaps the last remnant of *bikumi*, hundreds. Cf. Kele *li-u*, ten, and Sumerian *u*, ten.

In conclusion, may I invite answers to two questions? (i) Ibo *obi*, a chief is obviously Logo *opi*; Madi *okpi*. When was there a dominant tribe with such a name? To-day the Ba-kopi of Uganda are peasants; and the Copi an insignificant section of Luo people in North Bunyoro.

(ii) Logo, as well as Ibo, presents the unique feature of a word for "people," corresponding in use exactly to the Bantu phrase *abantu bagambye*, people say (usually *Bagambye*, they say). We must, therefore, suppose the word to be a corruption either of Mundu or Bandu. Hence, Logo *mu-ndia*, *ndia*; Ibo *ndi*, people.

But in Agambe the syllable *ndi* has been re-duplicated as *lidri*, giving Ag. *balidri*, people (often shortened to *Ba*), and the word becomes confounded with Logo *lidri*, life; whole, sound (as G. *-lamu*; Sw. *-zima*). In Ibo *ndu*,¹ life and *ndi(a) ndu*, live. Is there any other instance in degraded Bantu where the two ideas, *Bantu*, human existences, and *Ba-lamu*, living people, have become confounded?

W. A. CRABTREE.

¹ *N* for *ma*, as in Ibo *nsi*, excrement = Sw. *ma-vi*; G. *ma-zi*. Hence, *ndu* for *ma-lu*, that is, *lamu*, whole, sound. G. *obu-lamu*, life.

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